State of Michigan
Department of Technology, Management & Budget

Information, Communications and Technology (ICT) Strategy
Technical Advisory Services

Prepared for:

Deliverable F — Road Map
24 February 2012

Engagement: 330002080 — Final Version

Gartner

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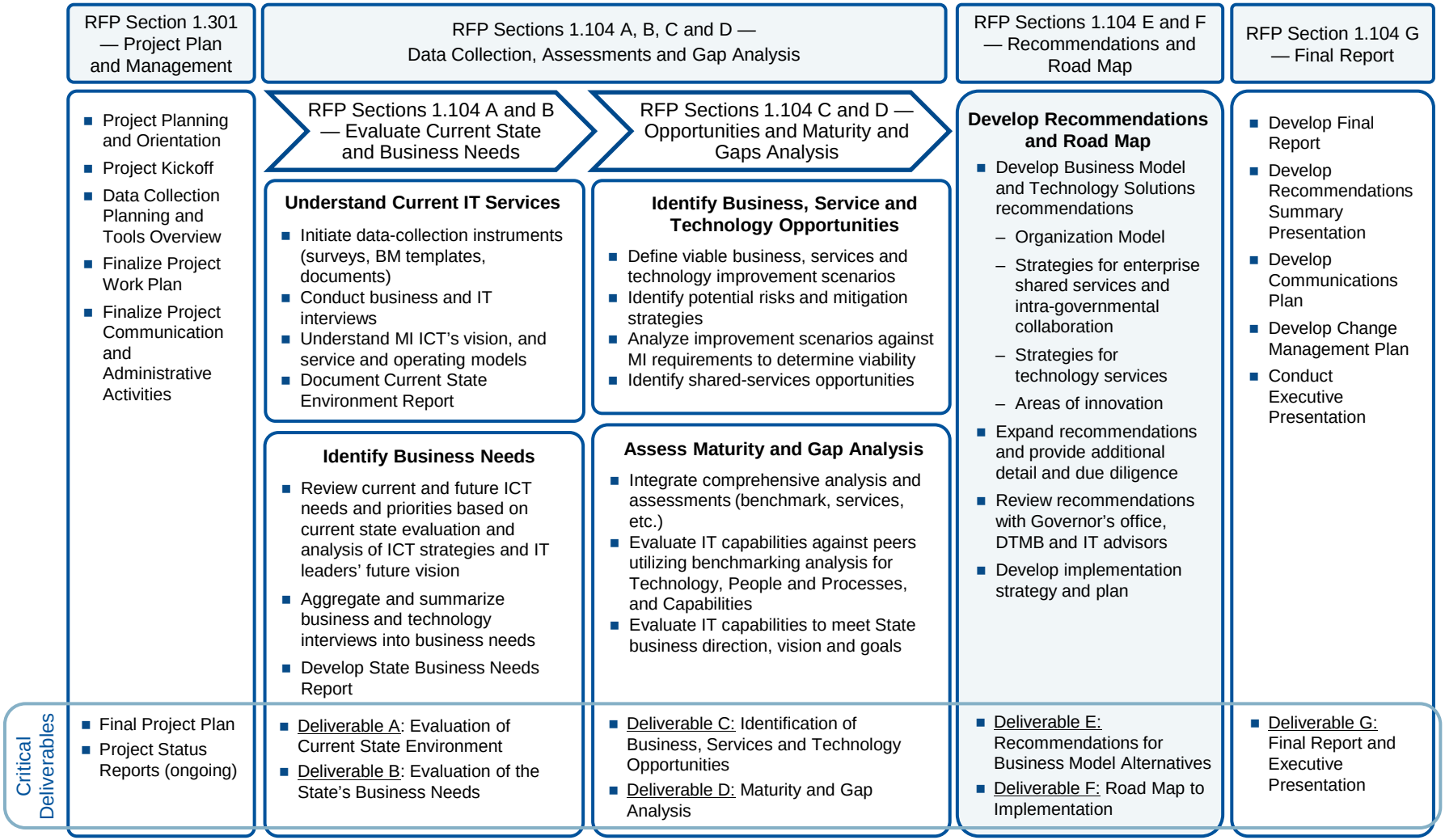
Background and Overview

- The State of Michigan partnered with Gartner to ensure alignment of its ICT assets, business model, operations and strategy with current and future needs.
- To begin this process, Gartner performed an extensive review of the State of Michigan Department of Technology, Management & Budget (DTMB) against nine separate ICT roles. The details of the Current State Assessment are documented in Deliverable A — Current State Assessment and Maturity Analysis.
- Gartner then used the findings in Deliverable B — Needs Assessment and ICT Business Effectiveness Survey Results, and Deliverable C — Identification of Business, Services and Technology Opportunities, to determine an appropriate Target State for DTMB.
- Using the Current State and Target State, Gartner prepared Deliverable D — Gap Analysis, to highlight the necessary gaps that DTMB would need to fill in order to move the organization from the Current State to the Target State.
- In Deliverable E, Gartner developed a series of 16 primary recommendations that would resolve the issues primarily highlighted in Deliverable D — Gap Analysis. These recommendations, if accepted and acted upon, will enable DTMB to achieve the Target State defined in Deliverable D.
- This deliverable explains the prioritization of projects and linkage to previously defined opportunities, and subsequently defines the concept of grouping like projects into programs to facilitate execution of the projects. Based on an assessment of speed of benefits realization, and the magnitude of impact for DTMB, a number of projects and programs rise to a higher priority for the State, and should be viewed as critical-path activities for achieving the four strategic goals.

Executive Summary

Gartner Methodology — Comprehensive View of State ICT Services



Executive Summary

High-Level Assessment Findings

- The Assessment Phase, which produced Deliverables A–D, highlighted several strengths and improvement opportunities.

Strengths	Improvement Opportunities
■ The State of Michigan is one of a handful of states that have consolidated to one ICT department that services all state agencies, and has benefitted from the economies of scale – In total, the State of Michigan spends $15M less than the peer group average, and spending is lower than the peer group in all functional areas ■ The IT Skills Assessment revealed that the State has a technically-skilled — but sub-optimally allocated — workforce ■ Michigan was also one of only two states to be given an "A" rating by the Center for Digital Government in conjunction with Government Technology magazine ■ The State's efforts have been recognized at the National Association of State Chief Information Officers (NASCIO) for its innovative solutions ■ The State partners with the federal government on progressive cyber-security initiatives	■ DTMB must better understand the business needs of its customers and better respond to their service expectations ■ DTMB must define an enterprise service catalog that clearly communicates the business value of its services and articulates meaningful service-level agreements (SLAs) ■ DTMB must evaluate the services that should be delivered with DTMB resources and the services that should be delivered by technology partners ■ DTMB must manage the external (contractor) and internal (State staff) costs of its projects ■ DTMB must manage its application portfolio and make the necessary investments to modernize its applications and reduce its application support costs ■ DTMB must improve its procurement management capabilities and implement formal vendor management processes

Executive Summary

In Deliverable C, the Following Opportunities were Identified and Categorized

Speed of Benefits Realization

	Lower Impact	Higher Impact
Faster	**Quick Wins** ■ Position the IO as a Strategic Partner ■ Engage Local Governments ■ Clarify Services to Customer Agencies ■ Leverage the Tools DTMB Already Owns ■ Institutionalize Enterprisewide Reporting Tool ■ Establish the Solution Architect Function ■ Reinforce SUITE Methodology ■ Conduct a Comprehensive Risk Assessment ■ Improve Communications from EA to Stakeholders ■ Conduct Security Training	**Top Priorities** ■ Address Agency Perception of DTMB's Business Value ■ Establish Business Analyst Function ■ Standardize Project Status Reporting ■ Standardize Project Management Processes ■ Establish Agency ICT Strategic Planning Processes That Are Separate from the Call for Projects ■ Realign EA to Report to an Executive-Level Function ■ Implement Automated ICT Operational Tools ■ Consolidate ICT Service Catalogs ■ Measure Customer Satisfaction ■ Improve Customer Metrics ■ Establish and Communicate Standard Procurement Process ■ Enable Procurement Automation
Slower	**Future Improvements** ■ Operationalize the Strategic Plan ■ Become More Business Architecture-Driven ■ Implement Predictive Analytics ■ Build Enterprise Information Management (EIM) Capability ■ Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities ■ Standardize Data Management Processes ■ Continue to Innovate Enterprise Architecture ■ Address Vendor Risk ■ Increase Scope of Vulnerability Management ■ Incorporate Privacy Management ■ Improve ICT Process Maturity	**Key Investments** ■ Improve Customer Service Satisfaction ■ Establish Internal Governance ■ Strengthen Application Portfolio Management ■ Optimize Resources to Enable Resource Pooling Across DTMB ■ Align Organizational Reporting and Governance Structure ■ Enhance Financial Management ■ Increase Skill and Training for Project Management Roles ■ Enable Citizen-Centric Government ■ Align EA with Industry Best Practices ■ Increase Scope of EA Coverage ■ More Closely Align Purchasing and Procurement Functions ■ Improve Security Operations Center (SOC) Operations ■ Enhance Data Security

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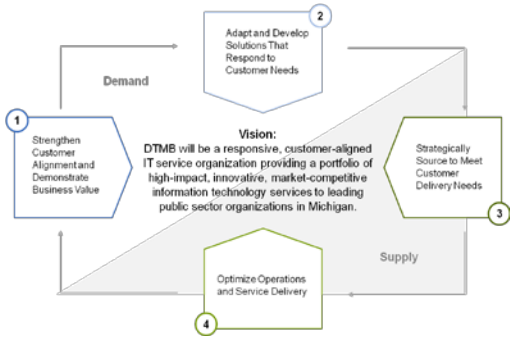
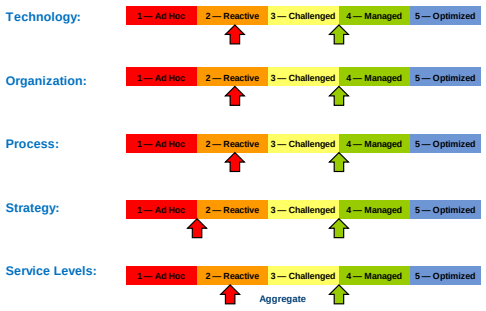
Executive Summary

Dual Approach for Defining Projects

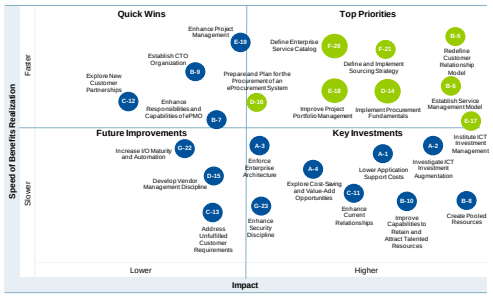
Gartner used the ITScore roles and the TOPSS Framework to structure the analysis of DTMB's current state and to understand statewide IT opportunities.



Gartner worked with the Steering Committee and DTMB Executives to perform a "Top-Down" Analysis which was used to formulate a strategic vision and goals.



Gartner also performed a "Bottom-Up" Analysis to identify improvement opportunities.

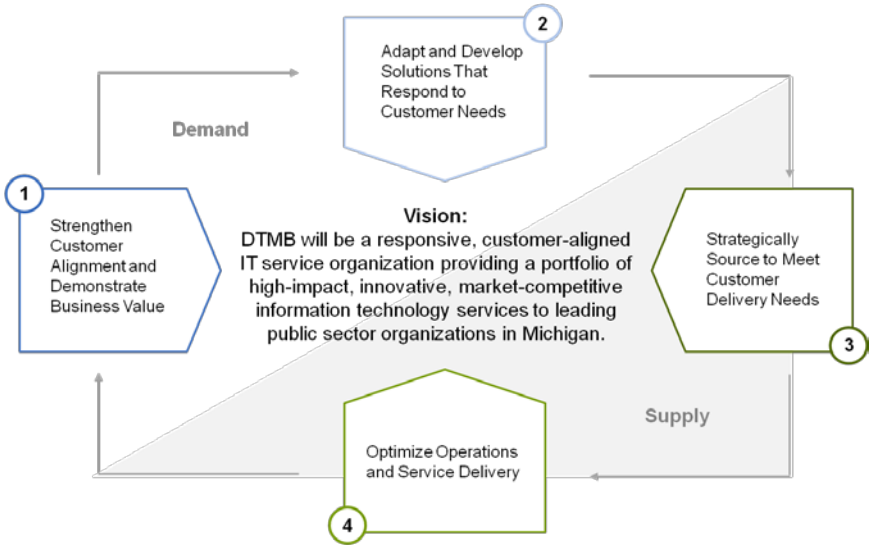


Using the output of both the Top-Down and Bottom-Up analyses, Gartner defined specific projects to both accomplish the State's strategic goals and to address specific improvement opportunities.

Executive Summary

Grouping Projects into Actionable 'Buckets'

- Gartner identified four major goals for DTMB to achieve its vision, as well as a series of recommendations crafted to guide DTMB toward the target state.
- Each recommendation is supported by a set of recommendation requirements which, in turn, map to specific actionable projects.
- As such, execution of all the defined projects constitutes successful implementation of Gartner's recommendations.
- The list of distinct projects is presented on the next two slides, followed by a slide portraying traceability to the opportunities identified in Deliverable C.



- To effectively and efficiently execute all the required projects, projects were bundled into **programs** that can be run as separate work streams, but collectively drive DTMB to ultimate achievement of its vision. Projects were grouped into programs based on common ownership and resource needs, programmatic similarities, predecessor/successor relationships and other factors.
- Finally, a comprehensive road map is presented, detailing the effort, costs, sequencing and dependencies for all projects in a holistic manner that can be effectively implemented by the State.

Executive Summary

Gartner Defined the Specific Projects and Mapped Them to the Opportunities

Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
A-1	Lower Application Support Costs	Agency Services				X
A-2	Investigate ICT Investment Augmentation	CIO				X
A-3	Enforce Enterprise Architecture	CTO		X		X
A-4	Explore Cost-Saving and Value-Add Opportunities	Procurement				X
B-5	**Redefine Customer Relationship Model**	**CIO**	**X**	**X**	**X**	**X**
B-6	**Establish Service Management Model**	**Solutions Portfolio Manager**	**X**			**X**
B-7	Enhance Responsibilities and Capabilities of ePMO	ePMO		X		X
B-8	Created Pooled Resources	Agency Services				X
B-9	Establish CTO Organization	CTO		X	X	X
B-10	Improve Capabilities to Retain and Attract Talented Resources	CIO				X
C-11	Enhance Current Relationships	Agency Services				X
C-12	Explore New Customer Partnerships	CTPSS		X		

NOTE: Top-Priority projects shown here in **bold** type

Executive Summary

Gartner Defined the Specific Projects and Mapped Them to the Opportunities (Cont'd)

Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
C-13	Address Unfulfilled Customer Requirements	Solutions Portfolio Manager		X	X	
D-14	**Implement Procurement Fundamentals**	**Procurement**	**X**			**X**
D-15	Develop Vendor Management Discipline	Procurement			X	
D-16	Prepare and Plan for the Procurement of an eProcurement System	Procurement	X			
E-17	**Institute ICT Investment Management**	**CIO**	**X**			**X**
E-18	**Improve Project Portfolio Management**	**ePMO**	**X**			**X**
E-19	Enhance Project Management	ePMO		X		X
F-20	**Define Enterprise Service Catalog**	**Solutions Portfolio Manager**	**X**			
F-21	**Define and Implement Sourcing Strategy**	**Procurement**	**X**			
G-22	Increase I/O Maturity and Automation	Infrastructure Services			X	
G-23	Enhance Security Discipline	Office of Enterprise Security		X	X	X

NOTE: Top-Priority projects shown here in **bold** type

Executive Summary

Gartner Defined the Specific Projects and Mapped Them to the Opportunities (Cont'd)

Speed of Benefits Realization

Faster

Quick Wins

- Position the IO as a Strategic Partner (B-5)
- Engage Local Governments (C-12)
- Clarify Services to Customer Agencies (F-18)
- Leverage the Tools DTMB Already Owns
- Institutionalize Enterprisewide Reporting Tool (C-13)
- Realign EA to Report to an Executive-Level Function (B-9)
- Establish the Solution Architect Function (B-9)
- Reinforce SUITE Methodology (B-7; E-19)
- Standardize Project Status Reporting (E-19)
- Standardize Project Management Processes (E-19)
- Conduct a Comprehensive Risk Assessment (G-23)
- Improve Communications from EA to Stakeholders (A-3)
- Conduct Security Training (G-23)

Top Priorities

- Address Agency Perception of DTMB's Business Value (F-20)
- Establish Business Analyst Function (B-5)
- Establish Agency ICT Strategic Planning Processes That Are Separate from the Call for Projects (E-17; E-18)
- Consolidate ICT Service Catalogs (B-6; F-20; F-21)
- Measure Customer Satisfaction (B-5)
- Improve Customer Metrics (B-5)
- Establish and Communicate Standard Procurement Process (D-14)
- Enable Procurement Automation (D-16)

Slower

Future Improvements

- Operationalize the Strategic Plan (B-5)
- Become More Business Architecture-Driven (B-9)
- Implement Predictive Analytics (C-13)
- Build Enterprise Information Management (EIM) Capability (C-13)
- Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities (C-13)
- Standardize Data Management Processes (C-13)
- Continue to Innovate Enterprise Architecture (B-9)
- Address Vendor Risk (D-15)
- Increase Scope of Vulnerability Management (G-23)
- Incorporate Privacy Management (G-23)
- Implement Automated ICT Operational Tools (G-22)
- Improve ICT Process Maturity (G-22)

Key Investments

- Improve Customer Service Satisfaction (C-11)
- Establish Internal Governance (E-17; E-18)
- Strengthen Application Portfolio Management (A-1)
- Optimize Resources to Enable Resource Pooling Across DTMB (B-8)
- Align Organizational Reporting and Governance Structure (B-5 thru B-9)
- Enhance Financial Management (A-2; E-17)
- Increase Skill and Training for Project Management Roles (B-7; B-10; E-19)
- Enable Citizen-Centric Government (A-4)
- Align EA with Industry Best Practices (A-3)
- Increase Scope of EA Coverage (A-3)
- More Closely Align Purchasing and Procurement Functions (D-14)
- Improve Security Operations Center (SOC) Operations (G-23)
- Enhance Data Security (G-23)

Lower | Higher

Impact

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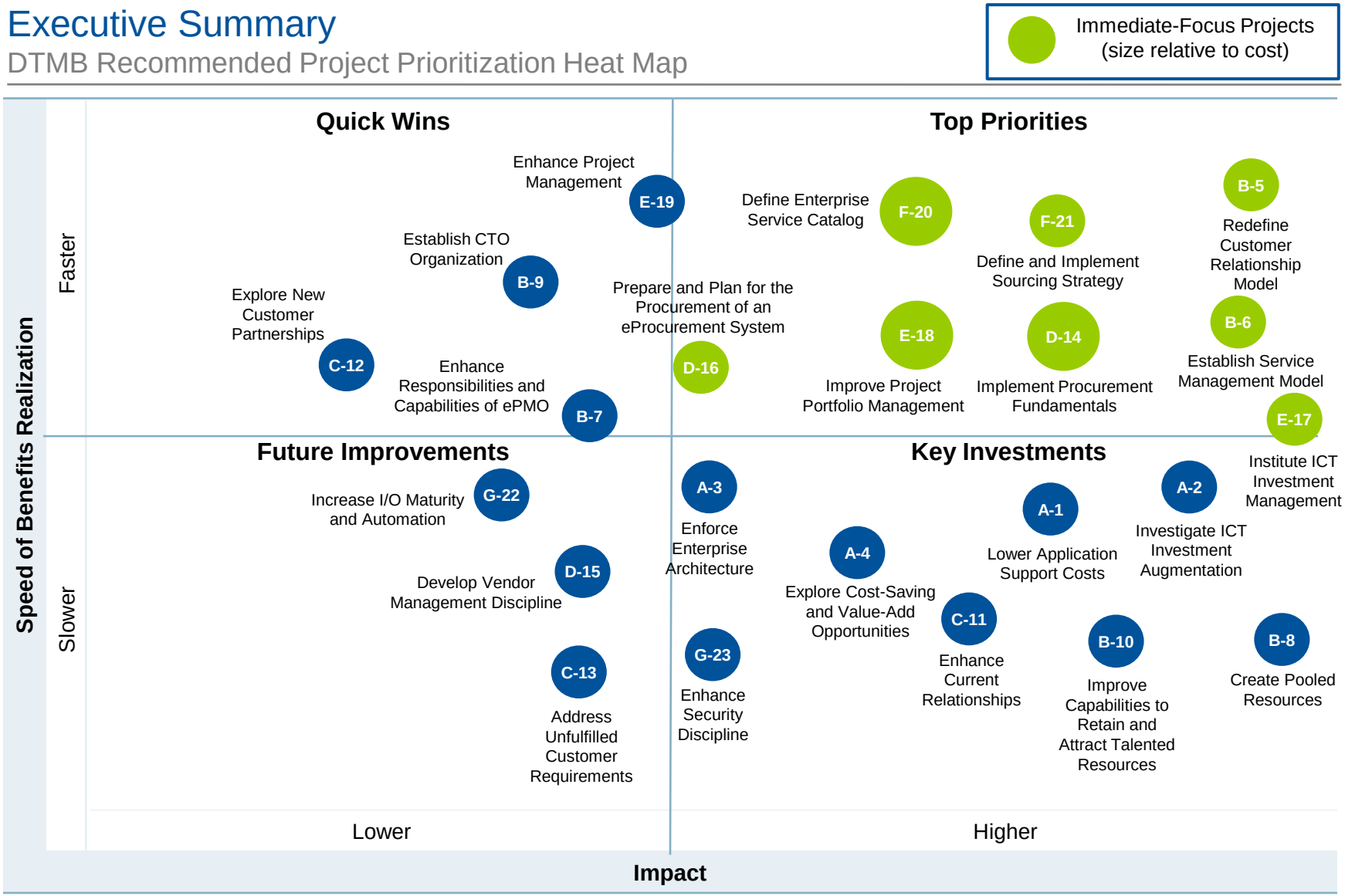
DTMB Recommended Project Prioritization Heat Map



Executive Summary

Grouping Projects into Programs

- As noted earlier, projects were grouped into programs to provide the State with actionable sets of activities that meet recommendation requirements.
- Each program will have an owner accountable for the successful execution, and the seven programs will be governed by a steering committee that will oversee the execution of the road map.
- The seven programs must be executed to achieve the four defined DTMB strategic goals and the overall DTMB vision. The programs are as follows:
  - A. Maximize Value of ICT
  - B. Transition to Target State Organizational Structure
  - C. Improve Customer Alignment
  - D. Improve Procurement
  - E. Facilitate Project Prioritization and Portfolio Management
  - F. Define Service Offerings
  - G. Improve Infrastructure and Security.
- The highest-priority projects, shown in the Top Priorities quadrant and highlighted in green, are foundational in nature and must be executed from a critical-path standpoint in order for the State to be successful in achieving its goals.

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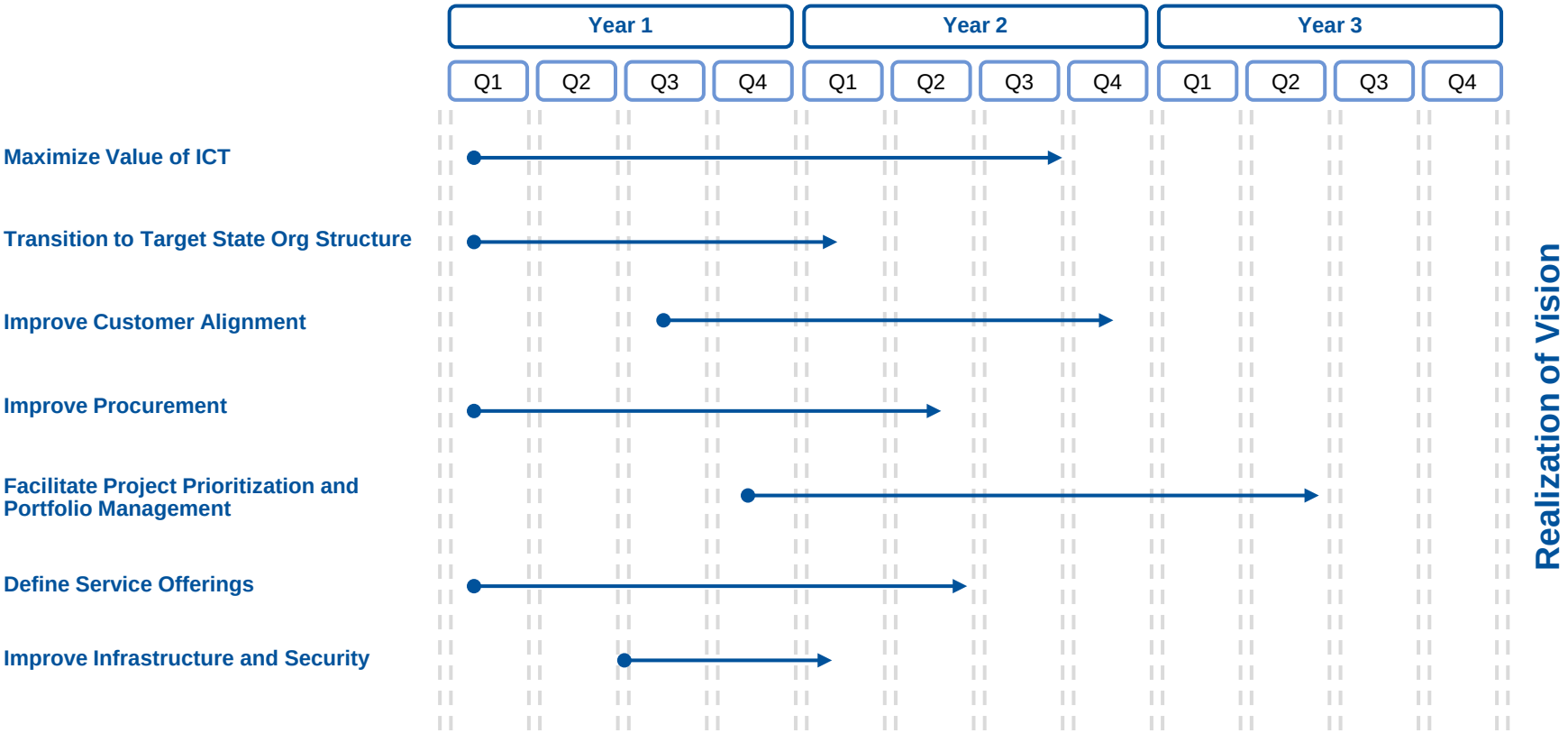
Road Map and Program Overview

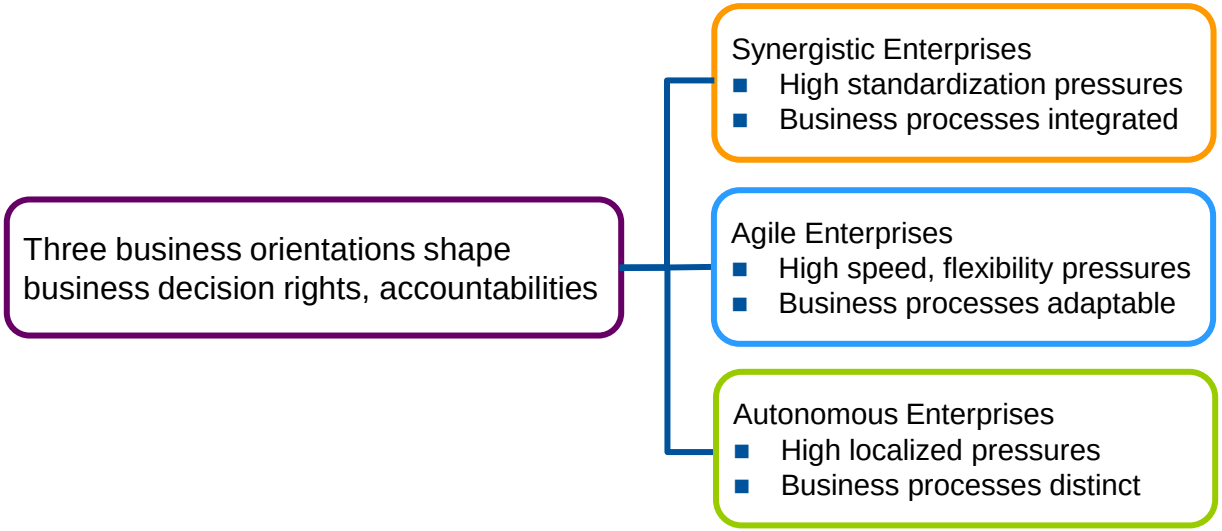
- The road map for executing the seven identified programs is presented below.



Executive Summary

Road Map Execution, Governance and Oversight

- DTMB must establish a governance and oversight process to monitor the execution of this road map. This governance body will monitor progress, as well as prioritize changes or competing activities that could impact execution of the road map.
- Enterprise business orientation is a key factor in determining the nature of business governance. Orientation addresses the boundary and scope issues and shapes the nature and location of decision rights and accountabilities that drive desirable behaviors.
- The three business orientations are listed below; given the vision and objectives of DTMB, the governance model most appropriate for implementation of the road map is synergistic.



Executive Summary

Road Map Execution, Governance and Oversight

- As illustrated below, business orientation shapes business process reach, coordination and systems. Synergistic enterprises share many commonalities with the DTMB vision.

Business Orientation / Enterprise Characteristics	Synergistic Enterprises	Agile Enterprises	Autonomous Enterprises
Business Processes	Standardized and integrated across business units	Modular, adaptable and easily combined	More distinct and independent
Coordination and Skills	Specified synergies mandated; duplication removed	Firm-wide, front-line responsiveness	Local innovation and competitive strengths
Management Systems for Coordination	BUs focus on both BU and firm-wide strategy	BUs adapt to local conditions within firm-wide organizing logic	Few mandates; just enterprise financial and risk management
Information and Information Systems	Substantial integrated firm-wide infrastructure, shared services	Modular capabilities centrally coordinated and architected	Thin layer firm-wide; each BU infrastructure tailored

Executive Summary

Road Map Execution, Governance and Oversight

- DTMB should explore which orientation and governance model best suits its needs. Given the similarities with synergistic enterprises, Gartner recommends enabling the following synergistic behaviors:
  - Focus on top-level, enterprisewide joint business and IT decision-making mechanisms.
  - Assess membership of top-level committees.
  - Ensure at least overlapping membership with the Executive Committee.
  - Ensure business-technology relationship managers are positioned high enough to work effectively with business unit executives.
  - Constantly review opportunities for synergy, sharing, reuse (and reward those).
  - Work with business units to educate them about common processes, components, architectures. Emphasize how it helps streamline both their business and IT decision making.
- In addition to the above behaviors, certain mechanisms have proven to be very effective in achieving efficacious governance. The top mechanisms are listed on the next slide, and should be considered when developing the final governance structure. Many of the mechanisms align with the findings, opportunities and recommendations Gartner developed as a result of the ICT assessment.

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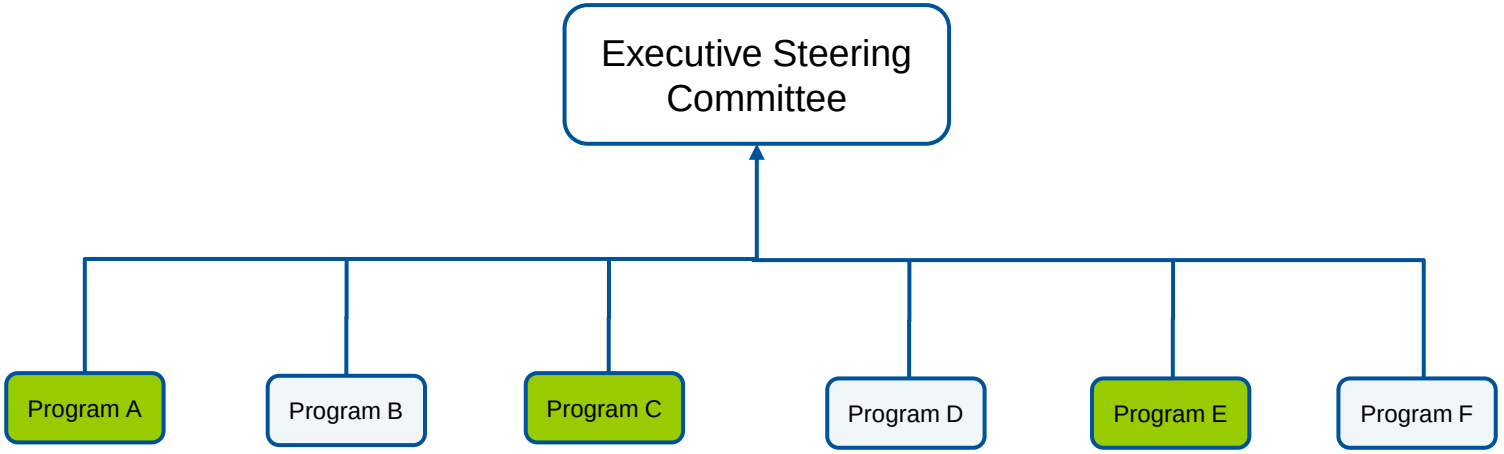
Governance Structure

- The Governance Committee should include representatives who represent ICT as well as the business. In addition, other stakeholder groups should be considered for representation on the Committee, including budget and procurement.
- Each program must have a specified owner who is responsible for coordinating and completing each project within the program.
- Workgroup and process teams that span programs will be key to execution and effective information sharing, but the governance framework for decision making should run through the Executive Steering Committee.



Executive Summary

Program A: Maximize Value of ICT

- Program A is focused on increased investment in ICT, opportunities to reduce total cost of ownership, and methods to derive maximum value out of ICT data and assets.
- The potential of Program A to ultimately yield significant financial benefits is very high, but diligent alternatives and financial analysis are paramount in the short term to ensure that future investments provide the best value to the State. The projects that comprise Program A are as follows:
  - A-1: Lower Application Support Costs
  - A-2: Investigate ICT Investment Augmentation
  - A-3: Enforce Enterprise Architecture
  - A-4: Explore Cost-Saving and Value-Add Opportunities.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $975K–$1.675M (est.) Internal Costs: $809K–$1.48M (est.) Potential Future Costs: ■ Application Replacement ■ Citizen Portal Implementation ■ Data Center Sourcing ■ Call Center Optimization ■ Network/Broadband Enhancements	■ Defined Application Review Process and list of near-term replacement candidates with ROI ■ Sustained funding for ICT transformation and increased value to customers ■ ROI model to exhibit benefits and support decisions ■ Lower Total Cost of Ownership ■ Foundational architecture for statewide initiatives ■ Innovation improvements	■ Documented Application Portfolio Management (APM) Process and list of initial candidates for near-term replacement ■ Business case for increased funding and short-, medium- and long-term investment plan ■ Enterprise Architecture Future State Road Map and Communication Plan ■ Independent Cost-Saving and Value-Add Analyses

Executive Summary

Program B: Transition to Target State Organizational Structure

- Program B is focused on establishing an organizational structure that will improve customer alignment, service delivery, innovation, project portfolio management and resource allocation.
- The completion of Program B will facilitate the transition to the Target State Functional Model. The projects that comprise Program B are as follows:
  - B-5: Redefine Customer Relationship Model
  - B-6: Establish Service Management Model
  - B-7: Enhance Responsibilites and Capabilities of ePMO
  - B-8: Create Pooled Resources
  - B-9: Establish CTO Organization
  - B-10: Improve Capabilities to Retain and Attract Talented Resources
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $850K–$1.1M (est.) Internal Costs: $1.584M–$2.112M (est.) Potential Future Costs: ■ Continued pooling of resources during applicational rationalization	■ Improved alignment with customers ■ Improved service delivery ■ Improved resource allocation ■ Improved ICT staff capabilities ■ Ability to coordinate all State ICT projects ■ Proactive development of innovative solutions that responds to business needs ■ Improved solution consistency across the enterprise	■ RACI models ■ Revised organization charts ■ Transition road map for pooled resources ■ Customer service plans ■ Service management plans ■ Statewide innovation plan ■ Updated job titles and job descriptions for ICT

Executive Summary

Program C: Improve Customer Alignment

- Program C is focused on improving existing customer relationships, exploring potential partnerships and addressing immediate business needs.
- The completion of Program C will improve DTMB's relationship with its ICT customers and will identify partnerships that may yield additonal economies of scale. The projects that comprise Program C are as follows:
  - C-11: Enhance Current Relationships
  - C-12: Explore New Customer Partnerships
  - C-13: Address Unfulfilled Customer Requirements.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $400K–$500K (est.) Internal Costs: $704K–$968K (est.) Potential Future Costs: ■ Mobility solution implementation ■ BI solution implementation ■ Customer self-service implementation	■ Increased customer satisfaction ■ Perception of DTMB as as strategic partner to the customer ■ Economies of scale for ICT procurements ■ New services that address stated business needs by customers	■ ICT strategic plans for all customers ■ Documented customer satisfaction measurement process ■ A formal DTMB Service and Solution Marketing Strategy ■ Signed partnership agreements with new partners ■ Service offerings in the service catalog for mobile and BI solutions ■ An assessment of the business need and requirements for a customer self-service offering by the State

Executive Summary

Program D: Improve Procurement

- Program D is aimed to fundamentally improve the composition and operation of the procurement, contract management and vendor management functions within DTMB.
- Execution of Program D will introduce added standardization and efficiency into core procurement processes; create standard manuals, templates and training for State employees; and ensure that the State is getting the best value for its ICT contracts and investments.
- The projects that comprise Program D are as follows:
  - D-14: Implement Procurement Fundamentals
  - D-15: Develop Vendor Management Discipline
  - D-16: Prepare and Plan for the Procurement of an eProcurement System.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $925K–$1.6M (est.) Internal Costs: $1.1M–$1.8M (est.) Potential Future Costs: ■ eProcurement software and implementation ■ Software licensing tracking solution, and exploration of other automation opportunities	■ Standardized and automated processes and increased efficiency ■ Improved contracts, terms and conditions ■ Vendor oversight to reduce contract risk and maximize value ■ Aggregated, centralized view of contracts and renegotiation targets ■ Enforcement of procurement policies and rules ■ Spend analysis capacity ■ Baseline reporting and dashboards	■ Documented Procurement Future Operating Model and Re-engineered Business Processes ■ Procurement Manual(s) and Standardized Templates ■ Vendor Management Charter, Org. Model and Staffing Plan ■ Contract Management Tracking Tool/Contract Portfolio Scorecard ■ Renegotiation Target Matrix ■ eProcurement Business Case, Procurement and Implementation

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Program E: Facilitate Project Prioritization and Portfolio Management

- Program E is focused on establishing processes to budget, coordinate and manage ICT projects within the State.
- The completion of Program E will allow DTMB to improve the monitoring and management of large ICT investments. The projects that comprise Program E are as follows:
  - E-17: Institute ICT Investment Management
  - E-18: Improve Project Portfolio Management
  - E-19: Enhance Project Management.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $500K–$700K (est.) Internal Costs: $792K–$1.144M (est.) Potential Future Costs: ■ N/A	■ The State will focus on the business benefits from ICT investments ■ The State will better leverage existing resources to accommodate project demands	■ RACI models ■ Defined templates for ICT project funding requests ■ ICT Project Portfolio for projects in progress and on hold ■ Documented process for handling customer change requests to project scope, schedule or budget

Executive Summary

Program F: Define Service Offerings

- Program F is focused on preparing an enterprise service catalog with defined rates and service levels, and determining the appropriate sourcing strategy for each service.
- The completion of Program F will result in the implementation of an enterprise service catalog and a statewide sourcing strategy. The projects that comprise Program F are as follows:
  - F-20: Define Enterprise Service Catalog
  - F-21: Define and Implement Sourcing Strategy.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $750K–$950K (est.) Internal Costs: $704K–$1.056M (est.) Potential Future Costs: ■ N/A	■ DTMB services will be consistently defined ■ Sourcing strategy and decision model to streamline decision making and yield wiser investments ■ Deep understanding of current costs/pricing in relation to market ■ Ongoing model for assessing service costs and pricing vs. outsourcing options	■ Enterprise Service Catalog ■ Rate Card ■ Sourcing Strategy Document ■ Business Case for each service to determine immediate sourcing decisions and model for future decisions ■ Road Map for Tactical Implementation of Sourcing Strategy

Executive Summary

Program G: Improve Infrastructure and Security

- Program G focuses on building off the past successes within the infrastructure and security domains to drive further efficiencies and adopt leading practices.
- Through the delivery of Program G, the State will institutionalize continuous improvement activities for two of its most successful disciplines, while also increasing proactive protection of State assets and data.
- The projects that comprise Program G are as follows:
  - G-21: Increase Infrastructure and Operations (I/O) Maturity and Automation
  - G-22: Enhance Security Discipline.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $500K–$700K (est.) Internal Costs: TBD Potential Future Costs: ■ I/O Automation Tools ■ 24/7 Security Operations Center (SOC) implementation/augmentation cost ■ Vulnerability Improvement Tools	■ Increased efficiency of service delivery ■ Lower total cost of ownership ■ Identify and rectify relevant vulnerabilities ■ 24/7 capability of monitoring and responding to security threats ■ Decreased vulnerability	■ Business Case for Tool Acquisitions ■ Implementation of ICT Operations Tools ■ Information Technology Service Management (ITSM) Road Map and Updated Documentation ■ Single, or integrated, Configuration Management Database (CMDB) ■ Completed Security Audit/Risk Assessment ■ Establishment of 24/7 SOC Operations ■ Vulnerability Improvement Plan and Acquisition of Appropriate Tools

Project Definition and Prioritization Overview

Project Definition and Prioritization Overview

Grouping Projects into Actionable 'Buckets'

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- Each recommendation is supported by a set of recommendation requirements which, in turn, map to specific actionable projects.
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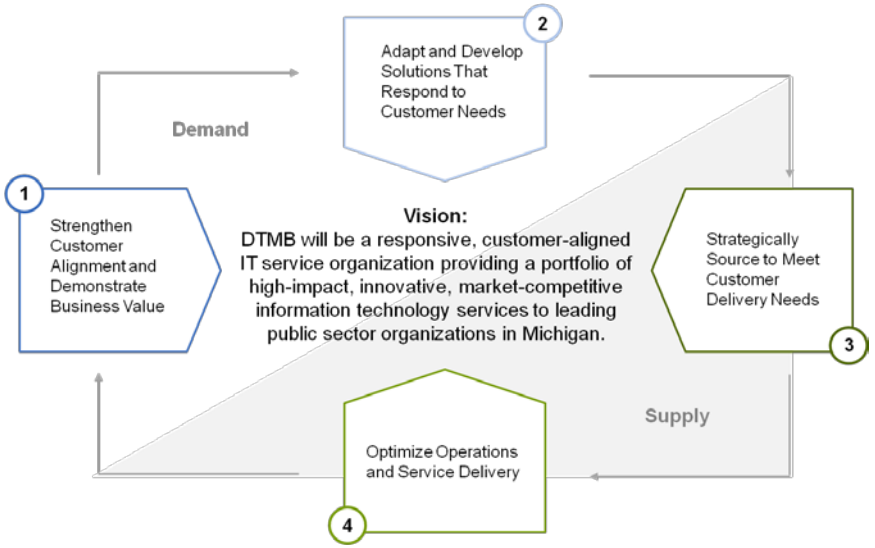
- The list of distinct projects is presented on the next slide, followed by a slide portraying traceability to the opportunities identified in Deliverable C.



- To effectively and efficiently execute all the required projects, projects were bundled into **programs** that can be run as separate work streams, but collectively drive DTMB to ultimate achievement of its vision. Projects were grouped into programs based on common ownership and resource needs, programmatic similarities, predecessor/successor relationships and other factors.
- Finally, a comprehensive road map is presented, detailing the effort, costs, sequencing and dependencies for all projects in a holistic manner that can be effectively implemented by the State.

Project Definition and Prioritization Overview

In Deliverable C, the Following Opportunities were Identified and Categorized

Speed of Benefits Realization

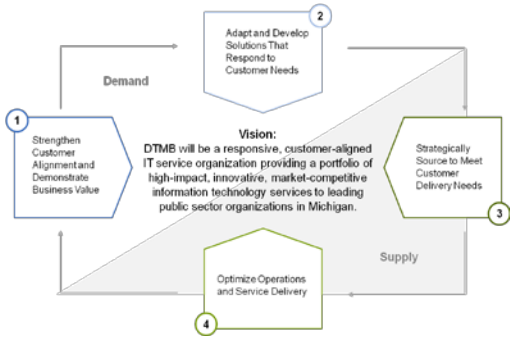
	Lower	Higher
Faster	**Quick Wins** ■ Position the IO as a Strategic Partner ■ Engage Local Governments ■ Clarify Services to Customer Agencies ■ Leverage the Tools DTMB Already Owns ■ Institutionalize Enterprisewide Reporting Tool ■ Realign EA to Report to an Executive-Level Function ■ Establish the Solution Architect Function ■ Reinforce SUITE Methodology ■ Standardize Project Status Reporting ■ Standardize Project Management Processes ■ Conduct a Comprehensive Risk Assessment ■ Improve Communications from EA to Stakeholders ■ Conduct Security Training	**Top Priorities** ■ Address Agency Perception of DTMB's Business Value ■ Establish Business Analyst Function ■ Establish Agency ICT Strategic Planning Processes That Are Separate from the Call for Projects ■ Consolidate ICT Service Catalogs ■ Measure Customer Satisfaction ■ Improve Customer Metrics ■ Establish and Communicate Standard Procurement Process ■ Enable Procurement Automation
Slower	**Future Improvements** ■ Operationalize the Strategic Plan ■ Become More Business Architecture-Driven ■ Implement Predictive Analytics ■ Build Enterprise Information Management (EIM) Capability ■ Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities ■ Standardize Data Management Processes ■ Continue to Innovate Enterprise Architecture ■ Address Vendor Risk ■ Increase Scope of Vulnerability Management ■ Incorporate Privacy Management ■ Implement Automated ICT Operational Tools ■ Improve ICT Process Maturity	**Key Investments** ■ Improve Customer Service Satisfaction ■ Establish Internal Governance ■ Strengthen Application Portfolio Management ■ Optimize Resources to Enable Resource Pooling Across DTMB ■ Align Organizational Reporting and Governance Structure ■ Enhance Financial Management ■ Increase Skill and Training for Project Management Roles ■ Enable Citizen-Centric Government ■ Align EA with Industry Best Practices ■ Increase Scope of EA Coverage ■ More Closely Align Purchasing and Procurement Functions ■ Improve Security Operations Center (SOC) Operations ■ Enhance Data Security

Impact

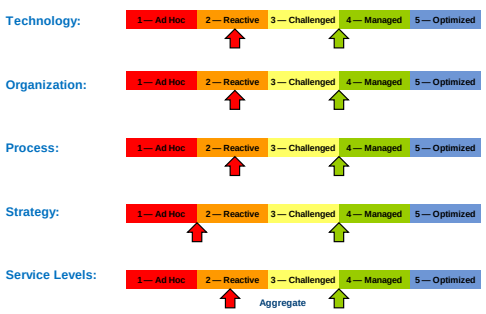
Project Definition and Prioritization Overview

Defining Projects

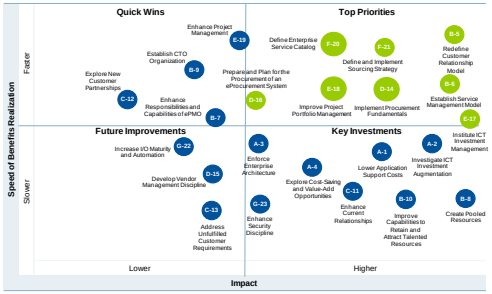
Gartner used the ITScore roles and the TOPSS Framework to structure the analysis of DTMB's current state and to understand statewide IT opportunities.



Gartner worked with the Steering Committee and DTMB Executives to perform a "Top-Down" Analysis which was used to formulate a strategic vision and goals.



Gartner also performed a "Bottom-Up" Analysis to identify improvement opportunities.



Using the output of both the Top-Down and Bottom-Up analyses, Gartner defined specific projects to both accomplish the State's strategic goals and to address specific improvement opportunities.

Project Definition and Prioritization Overview

Gartner Defined the Specific Projects and Mapped Them to the Opportunities

Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
A-1	Lower Application Support Costs	Agency Services				X
A-2	Investigate ICT Investment Augmentation	CIO				X
A-3	Enforce Enterprise Architecture	CTO		X		X
A-4	Explore Cost-Saving and Value-Add Opportunities	Procurement				X
B-5	**Redefine Customer Relationship Model**	**CIO**	**X**	**X**	**X**	**X**
B-6	**Establish Service Management Model**	**Solutions Portfolio Manager**	**X**			**X**
B-7	Enhance Responsibilities and Capabilities of ePMO	ePMO		X		X
B-8	Create Pooled Resources	Agency Services				X
B-9	Establish CTO Organization	CTO		X	X	X
B-10	Improve Capabilities to Retain and Attract Talented Resources	CIO				X
C-11	Enhance Current Relationships	Agency Services				X
C-12	Explore New Customer Partnerships	CTPSS		X		

NOTE: Top Priority projects shown here in **bold** type

Project Definition and Prioritization Overview

Gartner Defined the Specific Projects and Mapped Them to the Opportunities (Cont'd)

Project	Project Short Description	Project Owner	Top Priority	Quick Win	Future Improvement	Key investment
C-13	Address Unfulfilled Customer Requirements	Solutions Portfolio Manager		X	X	
D-14	**Implement Procurement Fundamentals**	**Procurement**	**X**			**X**
D-15	Develop Vendor Management Discipline	Procurement			X	
D-16	Prepare and Plan for the Procurement of an eProcurement System	Procurement	X			
E-17	**Institute ICT Investment Management**	**CIO**	**X**			**X**
E-18	**Improve Project Portfolio Management**	**ePMO**	**X**			**X**
E-19	Enhance Project Management	ePMO		X		X
F-20	**Define Enterprise Service Catalog**	**Solutions Portfolio Manager**	**X**			
F-21	**Define and Implement Sourcing Strategy**	**Procurement**	**X**			
G-22	Increase I/O Maturity and Automation	Infrastructure Services			X	
G-23	Enhance Security Discipline	Office of Enterprise Security		X	X	X

NOTE: Top Priority projects shown here in **bold** type

Project Definition and Prioritization Overview

Gartner Defined the Specific Projects and Mapped Them to the Opportunities (Cont'd)

Speed of Benefits Realization

Faster

Quick Wins

- Position the IO as a Strategic Partner (B-5)
- Engage Local Governments (C-12)
- Clarify Services to Customer Agencies (F-18)
- Leverage the Tools DTMB Already Owns
- Institutionalize Enterprisewide Reporting Tool (C-13)
- Realign EA to Report to an Executive-Level Function (B-9)
- Establish the Solution Architect Function (B-9)
- Reinforce SUITE Methodology (B-7; E-19)
- Standardize Project Status Reporting (E-19)
- Standardize Project Management Processes (E-19)
- Conduct a Comprehensive Risk Assessment (G-23)
- Improve Communications from EA to Stakeholders (A-3)
- Conduct Security Training (G-23)

Top Priorities

- Address Agency Perception of DTMB's Business Value (F-20)
- Establish Business Analyst Function (B-5)
- Establish Agency ICT Strategic Planning Processes That Are Separate From the Call for Projects (E-17; E-18)
- Consolidate ICT Service Catalogs (B-6; F-20; F-21)
- Measure Customer Satisfaction (B-5)
- Improve Customer Metrics (B-5)
- Establish and Communicate Standard Procurement Process (D-14)
- Enable Procurement Automation (D-16)

Slower

Future Improvements

- Operationalize the Strategic Plan (B-5)
- Become More Business Architecture-Driven (B-9)
- Implement Predictive Analytics (C-13)
- Build Enterprise Information Management (EIM) Capability (C-13)
- Enhance Governance of Business Intelligence (BI)/Performance Management (PM) Activities (C-13)
- Standardize Data Management Processes (C-13)
- Continue to Innovate Enterprise Architecture (B-9)
- Address Vendor Risk (D-15)
- Increase Scope of Vulnerability Management (G-23)
- Incorporate Privacy Management (G-23)
- Implement Automated ICT Operational Tools (G-22)
- Improve ICT Process Maturity (G-22)

Key Investments

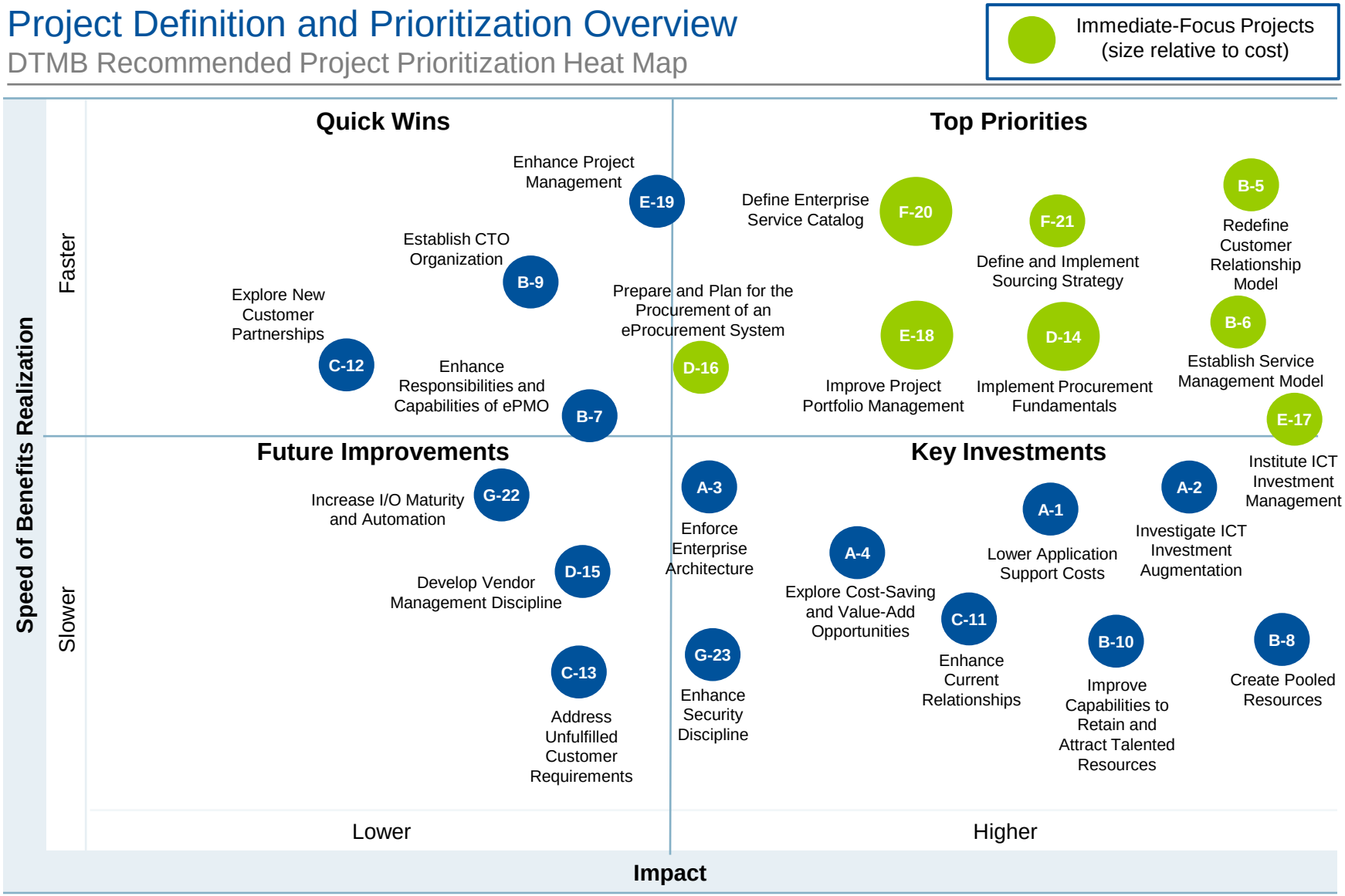
- Improve Customer Service Satisfaction (C-11)
- Establish Internal Governance (E-17; E-18)
- Strengthen Application Portfolio Management (A-1)
- Optimize Resources to Enable Resource Pooling Across DTMB (B-8)
- Align Organizational Reporting and Governance Structure (B-5 thru B-9)
- Enhance Financial Management (A-2; E-17)
- Increase Skill and Training for Project Management Roles (B-7; B-10; E-19)
- Enable Citizen-Centric Government (A-4)
- Align EA with Industry Best Practices (A-3)
- Increase Scope of EA Coverage (A-3)
- More Closely Align Purchasing and Procurement Functions (D-14)
- Improve Security Operations Center (SOC) Operations (G-23)
- Enhance Data Security (G-23)

Lower | Higher

Impact

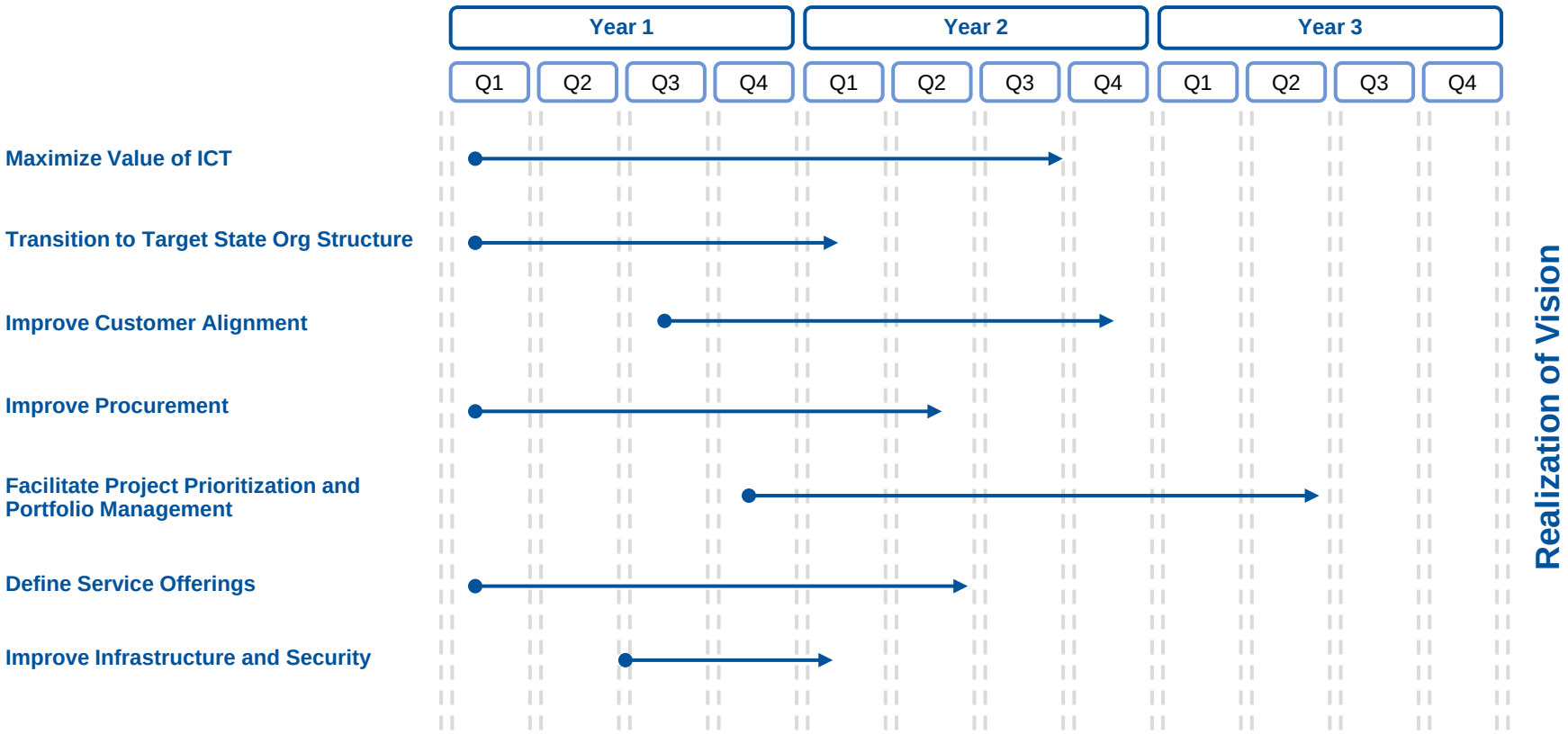
Project Definition and Prioritization Overview

DTMB Recommended Project Prioritization Heat Map



DTMB Programs Road Map

Program Overview

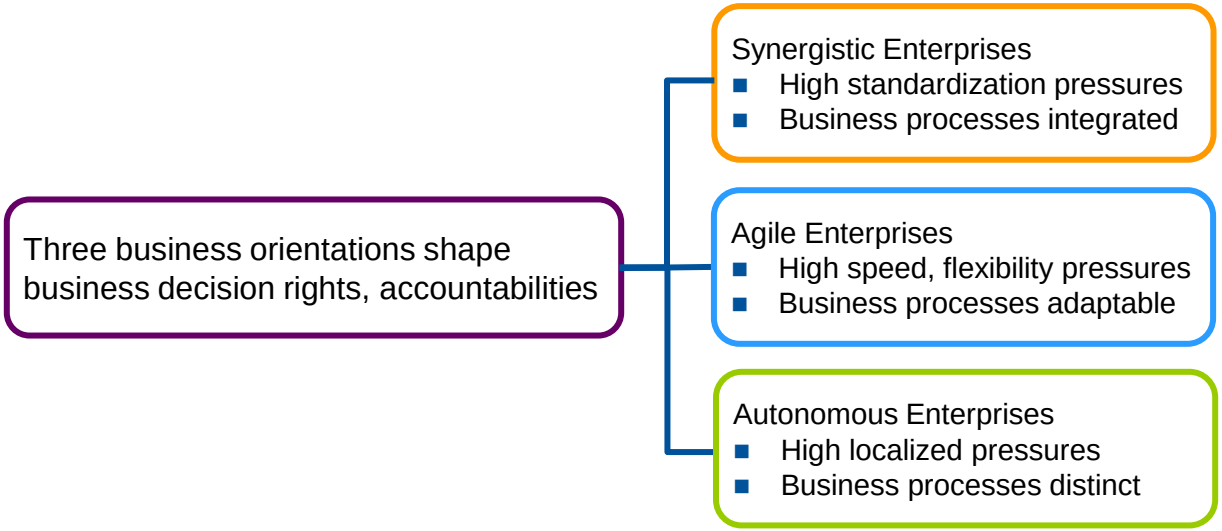


Program Governance

Program Governance

Road Map Execution, Governance and Oversight

- DTMB must establish a governance and oversight process to monitor the execution of this road map. This governance body will monitor progress, as well as prioritize changes or competing activities that could impact execution of the road map.
- Enterprise business orientation is a key factor in determining the nature of business governance. Orientation addresses the boundary and scope issues and shapes the nature and location of decision rights and accountabilities that drive desirable behaviors.
- The three business orientations are listed below; given the vision and objectives of DTMB, the governance model most appropriate for implementation of the road map is synergistic.



Program Governance

Road Map Execution, Governance and Oversight (Cont'd)

- As illustrated below, business orientation shapes business process reach, coordination and systems. Synergistic enterprises share many commonalities with the DTMB vision.

Business Orientation / Enterprise Characteristics	Synergistic Enterprises	Agile Enterprises	Autonomous Enterprises
Business Processes	Standardized and integrated across business units	Modular, adaptable and easily combined	More distinct and independent
Coordination and Skills	Specified synergies mandated; duplication removed	Firm-wide, front-line responsiveness	Local innovation and competitive strengths
Management Systems for Coordination	BUs focus on both BU and firm-wide strategy	BUs adapt to local conditions within firm-wide organizing logic	Few mandates; just enterprise financial and risk management
Information and Information Systems	Substantial integrated firm-wide infrastructure, shared services	Modular capabilities centrally coordinated and architected	Thin layer firm-wide; each BU infrastructure tailored

Program Governance

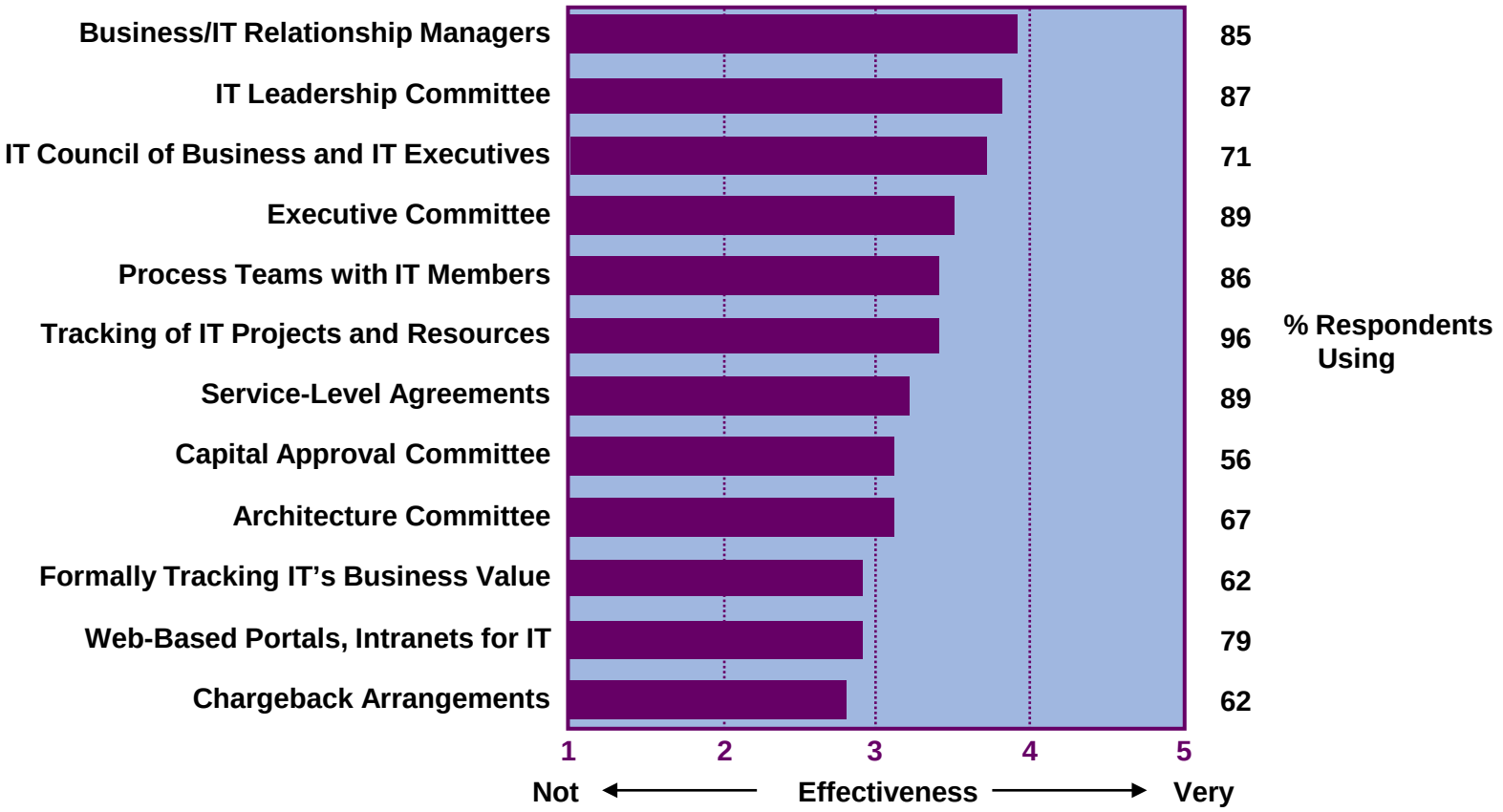
Road Map Execution, Governance and Oversight (Cont'd)

- DTMB should explore which orientation and governance model best suits its needs. Given the similarities with synergistic enterprises, Gartner recommends enabling the following synergistic behaviors:
  - Focus on top-level, enterprisewide joint business and IT decision-making mechanisms.
  - Assess membership of top-level committees.
  - Ensure at least overlapping membership with the Executive Committee.
  - Ensure business-technology relationship managers are positioned high enough to work effectively with business unit executives.
  - Constantly review opportunities for synergy, sharing, reuse (and reward those).
  - Work with business units to educate them about common processes, components, architectures. Emphasize how it helps streamline both their business and IT decision making.
- In addition to the above behaviors, certain mechanisms have proven to be very effective in achieving efficacious governance. The top mechanisms are listed on the next slide, and should be considered when developing the final governance structure. Many of the mechanisms align with the findings, opportunities and recommendations Gartner developed as a result of the ICT assessment.

Program Governance

Top Governance Mechanisms Focus on Business/IT Relationship

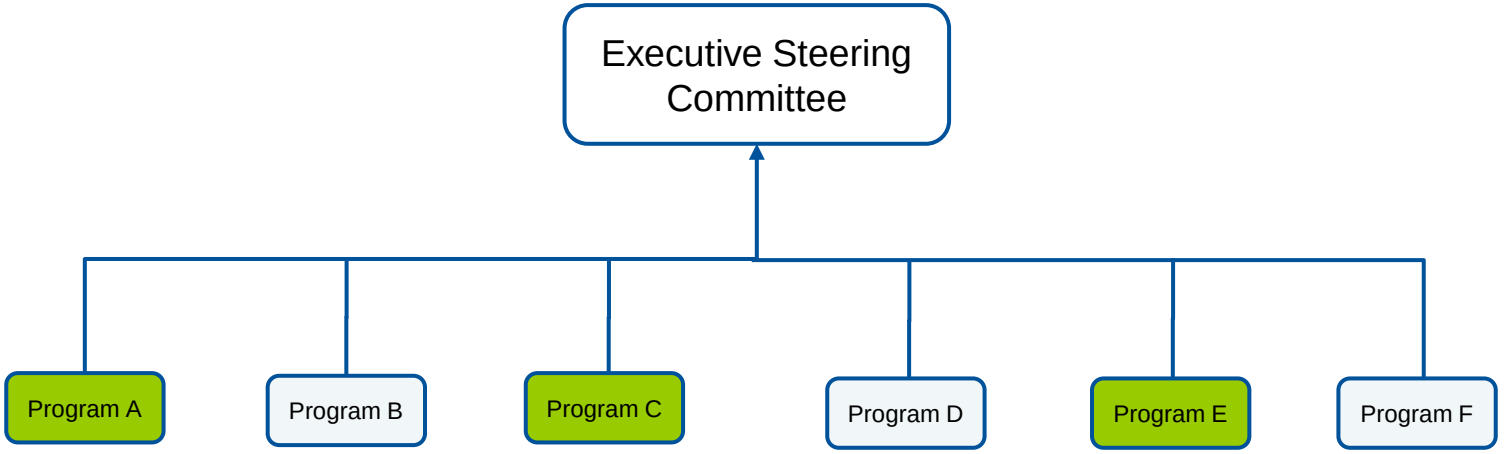
- Research shows that the business/IT relationship is a key mechanism for effective governance. The skills inventory identified this function as a key weakness in DTMB.



Program Governance

Governance Structure

- The Governance Committee should include representatives who represent ICT as well as the business. In addition, other stakeholder groups should be considered for representation on the Committee, including budget and procurement.
- Each program must have a specified owner who is responsible for coordinating and completing each project within the program.
- Workgroup and process teams that span programs will be key to execution and effective information sharing, but the governance framework for decision making should run through the Executive Steering Committee.



Program Governance

Governance Decision Domains and Styles

- Gartner research shows that top-level IT governance has five decision domains…
  1. IT principles (or maxims) are high-level statements about how IT will be used to create business value
  2. IT infrastructure strategies describes the approach to building shared and standard IT services
  3. IT architecture is the set of technical choices that guide the enterprise in satisfying business needs
  4. Business applications needs refer to specifying the business need for applications to be acquired or built
  5. IT investment and prioritization covers the process of progressing IT-enabled initiatives, their justification, approval and accountability
- …and six styles define input and decision rights:
  1. Business monarchy: executive leadership has decision rights (an executive committee)
  2. IT monarchy: IT executives have the decision rights (a CIO office)
  3. Feudal: business unit leaders have decision rights; authority is local
  4. Federal: C-level executives share rights with at least one other business group (can include IT)
  5. Duopoly: IT executives share rights with one business group
  6. Anarchy: individual process owners have decision rights; decisions are local.
- Combining these two elements shows how decisions, styles and mechanisms will fit together for DTMB.

Program Governance

IT Governance Arrangements Matrix

- Gartner's "IT Governance Arrangements Matrix" provides a simple framework for determining exactly how decisions, styles and mechanisms will fit together for DTMB and execution of the road map. Establishing these governance principles upfront is an important step for DTMB.

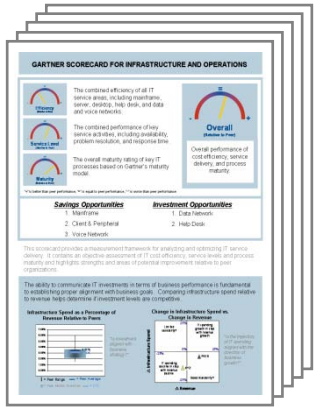
Decision Domain / Style	IT Principles		IT Infrastructure Strategies		IT Architecture		Business Application Needs		IT Investment and Prioritization	
	Input	Decision	Input	Decision	Input	Decision	Input	Decision	Input	Decision
Business Monarchy										Cap. Appr. Comm.
IT Monarchy				CIO IT Leadership		CIO IT Leadership				
Feudal										
Federal	Exec. Comm. Business Leaders		Exec. Comm. Business Leaders		Some Exec. + Some Business Leaders Business Pro Own				Exec. Comm. Business Leaders	
Duopoly		Exec. Comm. IT Leadership					Business Leaders Business Pro Own	Business Leaders IT Leadership		
Anarchy										

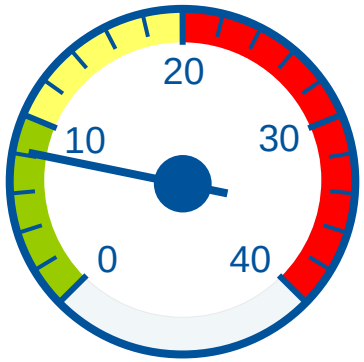
Input rights Decision rights

Program Governance

Metrics and Dashboards

- The program owner will be responsible for reporting key program metrics to the DTMB Director, the State CIO and impacted customers.
- In addition to project-oriented metrics (percent complete, on time, on budget), each program should develop several business-oriented metrics that will convey the value of execution of the programs in achieving State goals.
  - Examples include cost savings, customer satisfaction, increased efficiency
- DTMB should assess the viability of dashboards that convey progress to customers, executives and other stakeholder groups in meaningful, “easy to digest” graphs and figures.





Number of Legacy Applications Retired, 2013

- As an example, legacy systems retired as a result of implementing the application rationalization process could be reflected through a simple, but powerful, graphic that counts the number of retired systems over a specified period of time.
- Developing three to five metrics for each program will promote transparency and progress to all stakeholders.
- To that end, each program is summarized on the subsequent slides, highlighting the drivers, projects, estimated costs, benefits and major deliverables. Program-specific road maps and charters for all projects are presented later in the document.

Program A: Maximize Value of ICT

Program Overview

Program A: Maximize Value of ICT

Program Overview

- Program A is focused on increased investment in ICT, opportunities to reduce total cost of ownership, and methods to derive maximum value out of ICT data and assets.
- The potential of Program A to ultimately yield significant financial benefits is very high, but diligent alternatives and financial analysis are paramount in the short term to ensure that future investments provide the best value to the State. The projects that comprise Program A are as follows:
  - A-1: Lower Application Support Costs
  - A-2: Investigate ICT Investment Augmentation
  - A-3: Enforce Enterprise Architecture
  - A-4: Explore Cost-Saving and Value-Add Opportunities.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

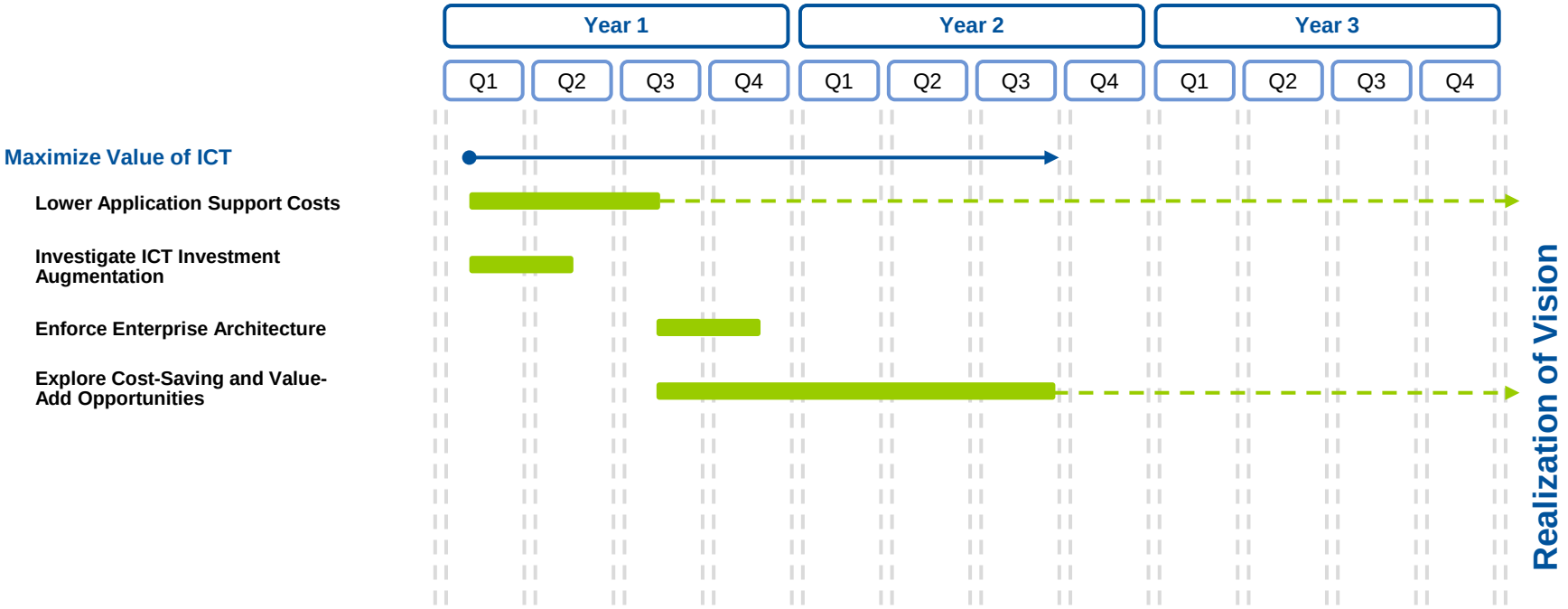
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $975K–$1.675M (est.) Internal Costs: $809K–$1.48M (est.) Potential Future Costs: ■ Application Replacement ■ Citizen Portal Implementation ■ Data Center Sourcing ■ Call Center Optimization ■ Network/Broadband Enhancements	■ Defined Application Review Process and list of near-term replacement candidates with ROI ■ Sustained funding for ICT transformation and increased value to customers ■ ROI model to exhibit benefits and support decisions ■ Lower Total Cost of Ownership ■ Foundational architecture for statewide initiatives ■ Innovation improvements	■ Documented Application Portfolio Management (APM) Process and list of initial candidates for near-term replacement ■ Business Case for increased funding and short-, medium- and long-term investment plan ■ Enterprise Architecture Future State Road Map and Communication Plan ■ Independent Cost-Saving and Value-Add Analyses

Program A: Maximize Value of ICT

Program Road Map

Program……
Project ……
Follow-On Tasks…

- DTMB should immediately begin Program A to rationalize its application portfolio, application tools and platforms to determine candidates for replacement. In addition, exploring opportunities for increased ICT investment should be pursued to realize its vision.



Program A: Maximize Value of ICT

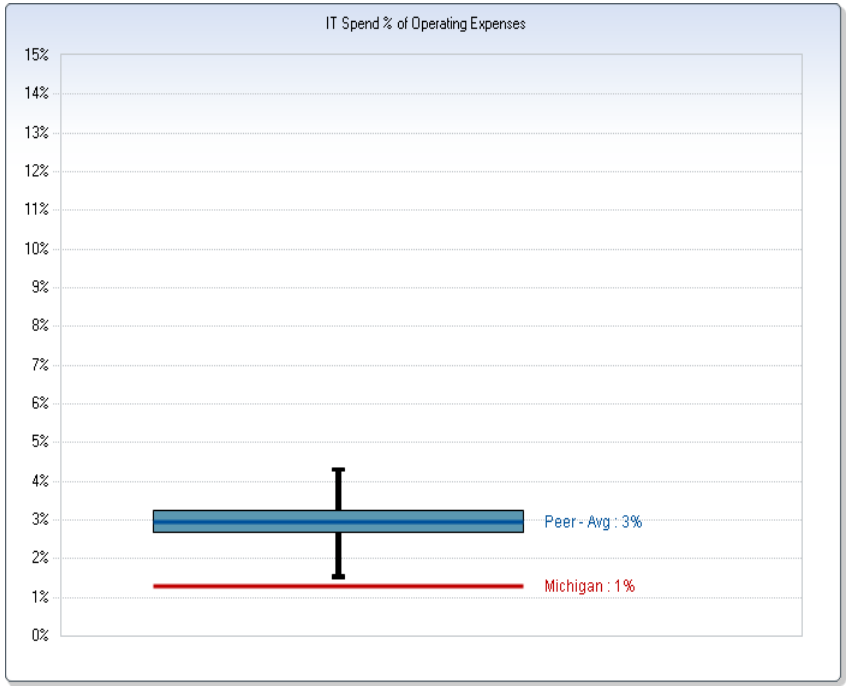
- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - State of Michigan IT Spending Overview
  - Application Portfolio Rationalization Overview
  - Data Center Assessment Overview
  - Smart Government Overview
  - Program A Project Charters.

Program A: Maximize Value of ICT

State of Michigan IT Spending Overview

Program A: Maximize Value of ICT

State of Michigan IT Spending Overview: IT Spending as a Percentage of OPEX



Cylinder denotes the median 50% of responses

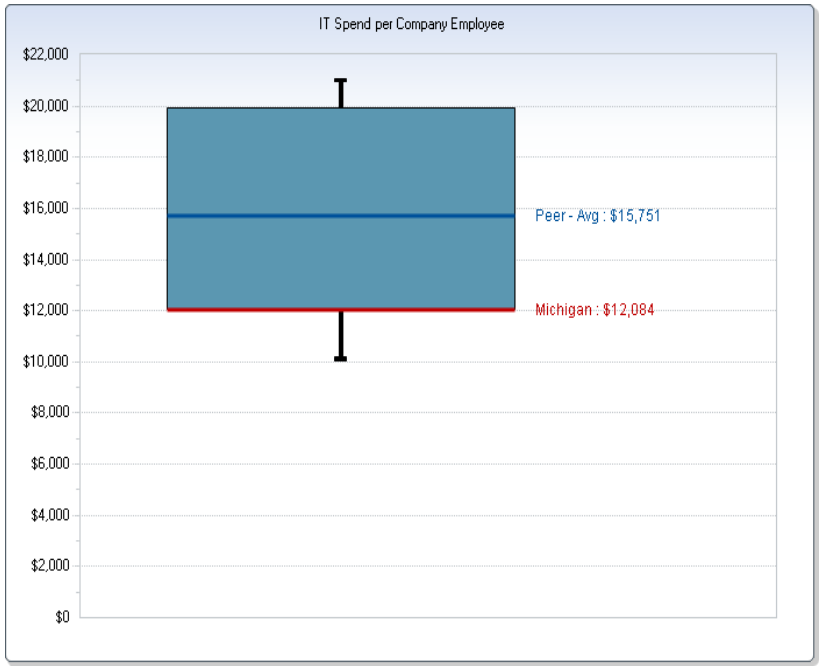
= Peer Range = Peer Middle Quartiles

= Peer Average = Michigan

- The State of Michigan's IT spending as a percentage of operating expenses (OPEX) of 1% is significantly lower than the peer average of 3%.
- IT spending as a percentage of OPEX provides a view of the role ICT plays in the spending patterns of the business. The greater the amount of the operating expenses that is dedicated to IT, typically the greater need for visibility into the IT investments the business will require.
- Organizations with a near-average total IT spend percentage, but with higher-than-average infrastructure spend, should assess the nature of their IT environment. Infrastructure investments may be used strategically, or might simply reflect high maintenance costs of legacy systems.

Program A: Maximize Value of ICT

State of Michigan IT Spending Overview: IT Spending per Company Employee



Cylinder denotes the median 50% of responses

= Peer Range **= Peer Middle Quartiles**

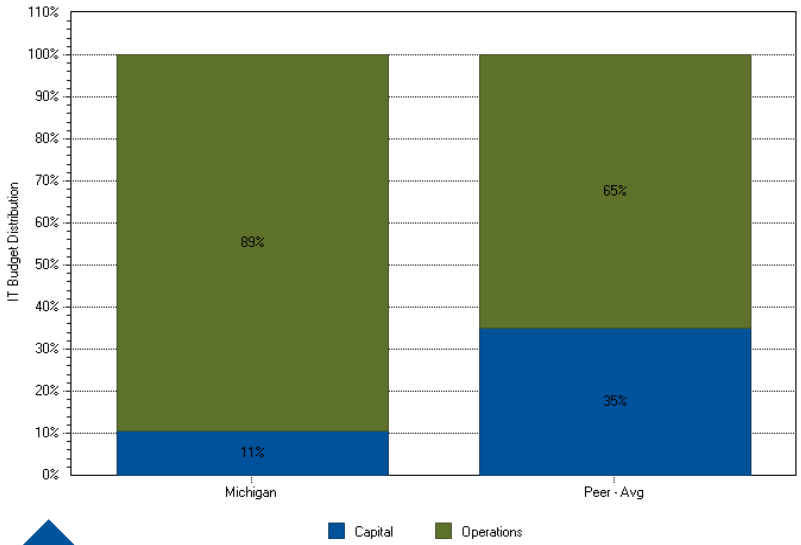
= Peer Average **= Michigan**

*Source: Michigan Civil Service Commission HWF2, 2011

- IT spending per employee provides insight into the amount of technology support an organization's workforce receives.
- High spending can imply higher levels of automation and/or higher investment in IT in general. Low spending levels can be related to higher overall staffing levels and/or lower IT investment than peers.
- Large variations within industry groups can represent different business models for service or product delivery.
- As illustrated in the graph to the left, the State of Michigan spends approximately $12,084 per employee, while the peer organization average is $15,751 per employee.
- With its 47,918 employees*, the State of Michigan under-spends peers, from an IT-spending-per-employee perspective, by approximately **$175M.**

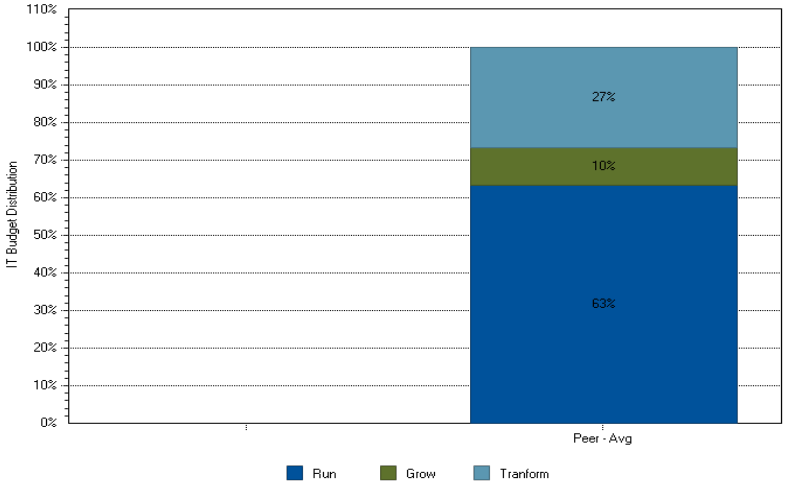
Program A: Maximize Value of ICT

State of Michigan IT Spending Overview: IT Budget Distribution — Capital vs. Operations



- The State of Michigan's spending on capital expenses (11%) is far below peer averages (35%), which could suggest the inverse of the circumstances listed above.
- Generally speaking, high-"run" spending may indicate a limited strategic role for ICT, while high-"grow" and "transform" spending might indicate ICT has a stronger strategic role where the focus should be on ROI.

- IT capital expenses vs. operational expenses helps to portray the investment profile for an organization in a given year.
- Organizations with higher capital spending may:
  - Be investing heavily in strategic ICT infrastructure
  - Have reached a planned point of investment in their infrastructure life cycle
  - Not have been managing asset investments well (i.e., "catching up")
  - Simply have a more aggressive capitalization policy.



Program A: Maximize Value of ICT

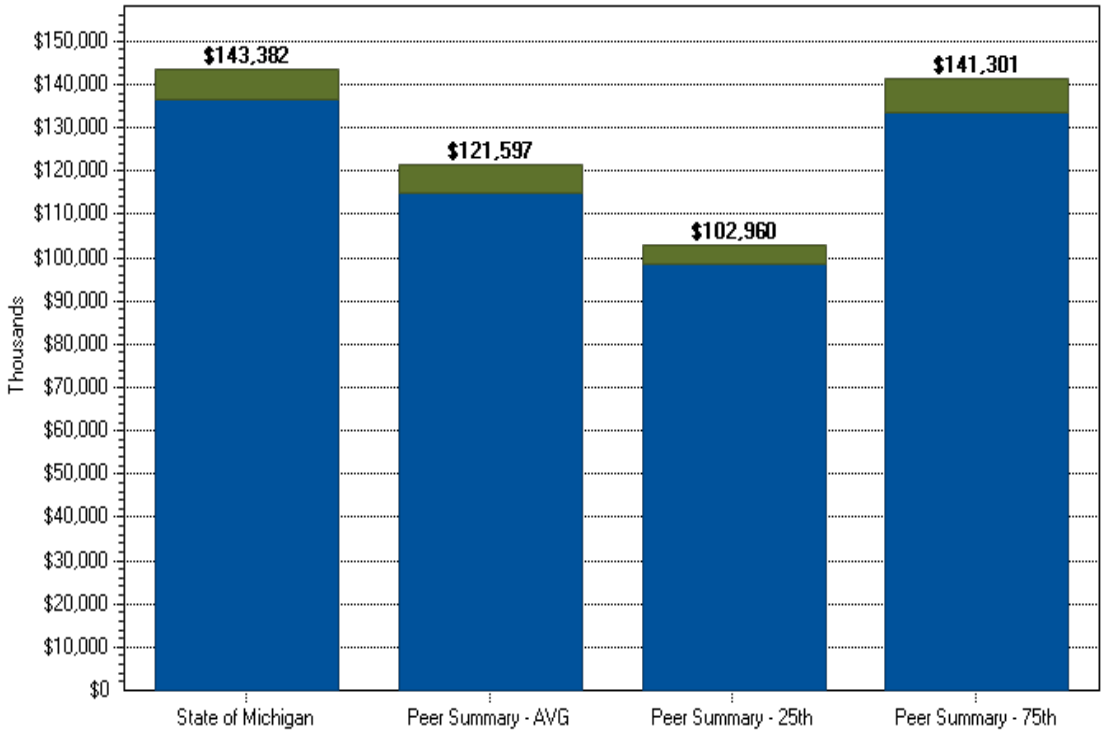
Application Portfolio Rationalization Overview

Program A: Maximize Value of ICT

Application Portfolio Rationalization Overview: Application Support Costs

- State of Michigan spend for Applications Sustainment, at $143.4M, is within range of the peer 75th percentile.
- State of Michigan ICT spend for Non-ERP aligns closest with the peer 75th percentile, while spend for ERP applications is almost the same as the peer average.

Spend by Functional Area

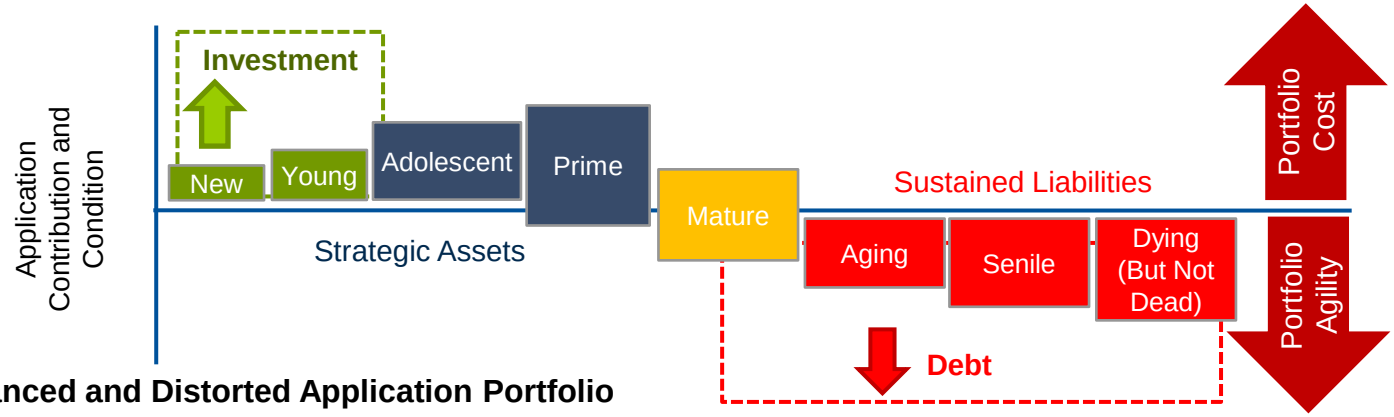


	State of Michigan	Peer Summary - AVG	Peer Summary - 25th	Peer Summary - 75th
Application Support	$136,744	$115,017	$98,587	$133,427
Application Support - ERP	$6,639	$6,580	$4,373	$7,874

Program A: Maximize Value of ICT

Application Portfolio Rationalization Overview: Application Life Cycle

- During the past decade of budget cuts, the application portfolio has become a liability of deferred maintenance, postponed retirements and stop-gap fixes. Gartner research shows that the cumulative value of deferred maintenance is estimated to be $1 trillion by 2015.
  - This “IT debt” is not only an obligation, but also a substantial business and continuity risk
  - Many are unaware of or in denial about this massive maintenance backlog, and so lack a plan to address it
- Applications are left dying to avoid painful retirement efforts, and are brittle due to years of quick fixes and stop-gap measures.
  - Virtualization and the cloud are propping up aging, low-value applications
  - Retiring of applications requires investment in end-of-life assets, which, perceptively, is hard to justify
  - Even when justified, gaining commitment from all stakeholders takes time and experience
  - Applications are pushed well beyond their original intent, for which they were never designed
  - The resultant “accidental architecture” is an unplanned, ineffective and inefficient portfolio

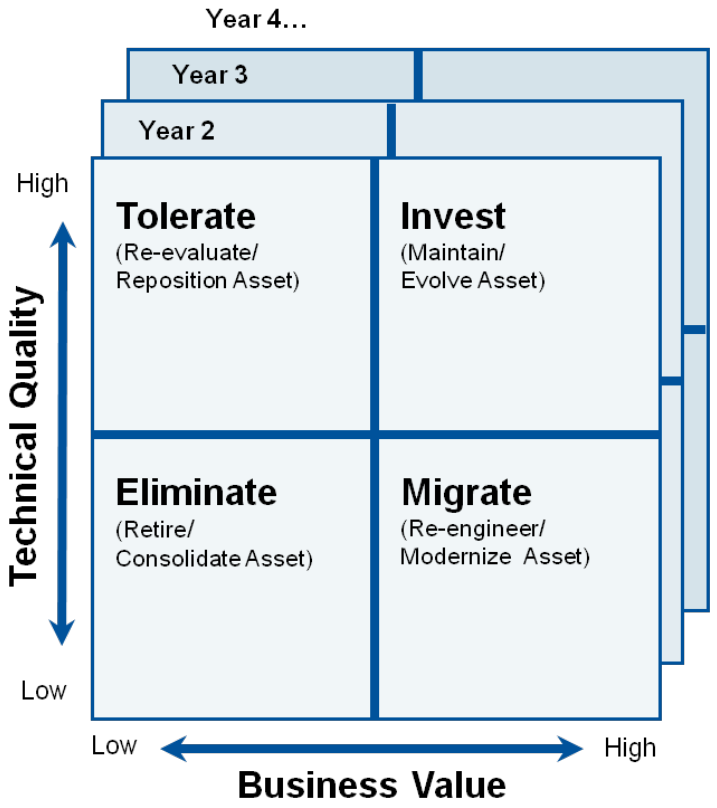


Imbalanced and Distorted Application Portfolio

Program A: Maximize Value of ICT

Application Portfolio Rationalizatio Overview: Gartner TIME Analysis

- Demand for application services is expected to grow 10–20% compound annual growth rate (CAGR). Without change, enterprises will fail to both sustain the portfolio and deliver new capabilities within acceptable cost and risk.
  - The application portfolio will continue to expand as IT debt grows, it's simply faster and easier to add an asset than to modify a potential liability
  - Costs will rise relative to the portfolio's increasing size, age and complexity
  - On average, application development and support already account for one-third of IT costs
- This trajectory is unsustainable; rebalancing the portfolio must be a concerted and collaborative effort. Reactive and tactical improvements will not effect necessary change in planning and behavior.
- Among Gartner's foundational recommendations are recommendations to establish an Application Portfolio Management process and subsequently assess legacy technologies and implement an application retirement strategy using a method such as Gartner's TIME analysis (right).



Program A: Maximize Value of ICT

Application Portfolio Rationalizatio Overview: Initial Application Modernization Candidates

- A major area of cost-savings and benefits realization opportunity relates to the State's aging application portfolio. By performing business cases and through strategic sourcing, the State can save millions in software, hardware, and support costs. In an effort to jump-start the application rationalization process, Gartner identified initial candidates for the State to investigate that can be further evaluated from a business value, technical quality and cost perspective.
- The Sales, Use and Withholding (SUW) application is a 30 year old application that brings in $13.7B in revenue for the State. SUW is the ideal candidate to replace because it will reduce support costs, improve customer service, improve audit functionality and allow the implementation of a stream-lined sales tax.

Agency	Application Name	Total Cost	Type	Application Age	Cost per FP
DHS	MiCSES	$5,870,241	In-house	9.00	$848
DCSC	MAIN (Mainframe)	$5,424,734	Outsource	17.00	$186
DCSC	Vision ORS (Clarety)	$2,220,569	In-house	10.00	$251
DCSC	DCDS (Data Collection and Distribution System)	$1,550,765	In-house	16.00	$786
Mich.gov	Michigan.gov	$1,198,209	In-house	12.00	$365
DCSC	MAIN (Web components: C&PE and ETP)	$1,096,994	Outsource	12.00	$214
DCH	Cost Settlement	$1,039,772	Outsource	22.00	$42
MDOS	BOS (Driver/Vehicle MF backend)	$1,024,565	In-house	31.00	$179
MDOC	OMNI	$784,538	In-house	17.00	$68
MDOC	COMPAS	$712,365	Vendor Package	6.00	$468
TREA	STAR (State Treasury Account Receivable)	$681,602	In-house	22.00	$44
LARA Det UIA CR	UIA TAX Processing Application	$602,284	In-house	22.00	$58
LARA Det UIA CR	One Stop Management Information System (OSMIS)	$516,674	In-house	13.00	$147
LARA Lan	Workers Compensation System (WORCS)	$508,015	In-house	22.00	$62
MSP	Criminal History Record (CHR)	$493,330	In-house	7.00	$192
MSP	MI Criminal Justice Information Network (MiCJIN)	$493,315	Vendor Package	10.00	$576
DHS	CDC/Billing	$462,695	In-house	11.00	$497
LARA Det UIA CR	Michigan Talent Bank (MTB)	$457,980	In-house	14.00	$222
DHS	CDC/IVR	$428,006	Outsource	11.00	$1,024
MDOS	Qualified Voter File (QVF)	$412,108	Outsource	15.00	$117
LARA Det UIA CR	Michigan Adult Education Reporting System (MAERS)	$229,915	In-house	12.00	$260
LARA Lan	OBSASE	$153,841	In-house	22.00	$20
MDOC	Corrections Management Information System (CMIS)	$75,738	In-house	22.00	$12
MDOS	Branch Revenue (BR)	$64,191	In-house	31.00	$57

Program A: Maximize Value of ICT

Data Center Assessment Overview

Program A: Maximize Value of ICT

Data Center Study Assessment Overview

- Gartner reviewed the Equaterra Data Center Study and made the following observations:
  - Given the data that Gartner reviewed, Equaterra's assessment of the State's present data center situation seemed to be adequate.
  - The Equaterra study grouped the assessment of the current data center and options for addressing space limitations with a sourcing decision. It was not clear which question Equaterra was trying to address.
  - The version of the cost model Gartner reviewed did not provide enough data to validate cost assumptions and calculations.
  - Although the alternatives were clearly stated, Gartner did not see a detailed risk assessment to address transition and ongoing operational risks.
  - It was not obvious, from the documentation that Gartner reviewed, which overall evaluation model was being used to make tradeoffs between cost, risk, functional requirements, technical requirements, etc., to come to the study's conclusion.
- Although Gartner does not necessarily disagree with Equaterra's recommendation, Gartner is not in a position to confirm the study's conclusion, and the State should perform additional analysis, particularly in regard to sourcing alternatives to ensure the best value to the State.

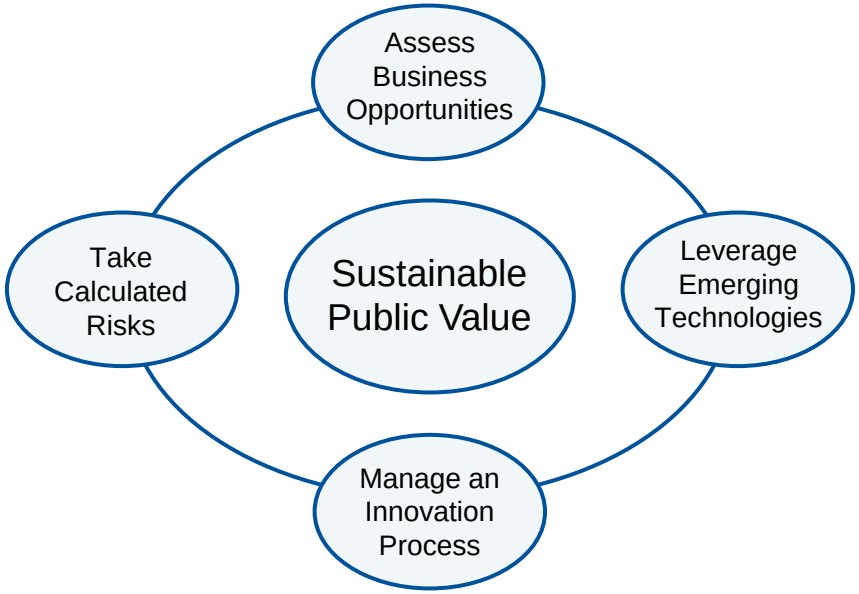
Program A: Maximize Value of ICT

Smart Government Overview

Program A: Maximize Value of ICT

Smart Government Overview: The Importance of Sustainable Public Value

- Delivering **sustainable public value** initiatives will become increasingly important as governments worldwide are faced with decreasing capital and operation budgets, skills drain, and growing uncertainty and change.
- Establishing sustainable public value is the primary focus of a new operational objective called **Smart Government.**
- States such as Michigan must evaluate the principles of Smart Government and understand how they should be applied to their operations and incorporated into their strategic plans.

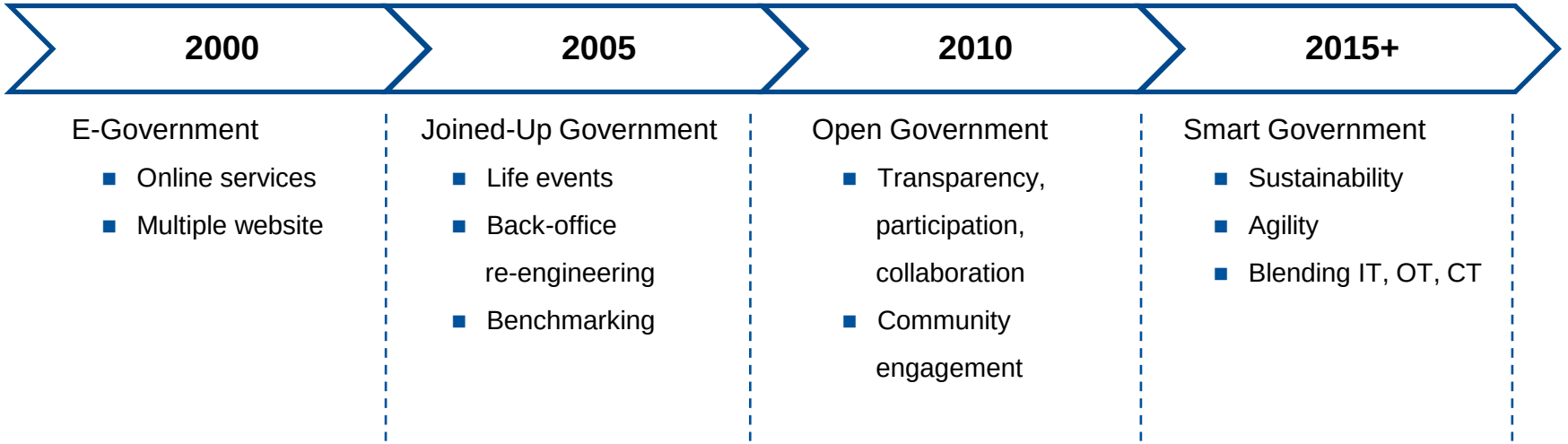


According to Gartner Research, "Improving operations" is the CIO's No. 1 business priority in 2014.

Program A: Maximize Value of ICT

Smart Government Overview: What Is “Smart Government”?

- Smart government is not e-government, joined-up government or Government 2.0, but it inherits some of the key principles and re-examines them in light of the emerging sustainability challenges.



- Integrates **information, communication** and **operational** technologies
- To **planning, management** and **operations**
- Across **multiple domains, process areas** and **jurisdictions**
- To generate **sustainable public value**

Program A: Maximize Value of ICT

Smart Government Overview: The Importance of a Smart Governance Operating Framework

- Smart government needs a *smart governance operating framework,* which supports event capture and processing, information exchange and analysis (internal and external information coming from multiple sources, including sensor and social data), user interface and interoperability between different vertical applications and subsystems. The framework can support either interoperability across tiers or within a tier across different domains, or both. The State of Michigan must understand these requirements and establish a governance framework that meets its operational needs.

Main Functionality

- Information exchange and analysis
- Event capture and processing
- User interface

Supports

- Interoperability
- Scalability
- Different deployment models

Program A: Maximize Value of ICT

Project Charters

Project	1. Lower Application Costs	Program	A. Maximize Value of ICT

Objectives

- Define criteria and process for evaluating application portfolio and rationalize to make near-term and ongoing investment decisions

Addressed Recommendation Requirement(s)

- 4-5-1: DTMB must establish an Application Portfolio Management process
- 4-5-2: DTMB must assess legacy technologies and implement the application retirement strategy
- 4-5-3: DTMB must establish the role of a business analyst who is responsible for understanding the business of its customers

Deliverables

- Documented Application Portfolio Management (APM) Process and Evaluation Model
- Execution of Initial Rationalization and Business Cases for Replacement/Migration Candidates

Scope	■ All State business applications
Project Sponsor	■ CIO
Business Owner	■ Agency Services Director
Critical Team Members	■ Project Manager (quarter-time) ■ Agency Services: 3–5 (half-time) ■ ePMO ■ Customers ■ DTMB Budget Office

High-Level Project Plan

1. Define APM process, participants and frequency
2. Establish governance model and RACI for APM activities
3. Develop assessment model for APM that includes business, technical quality and cost factors
4. Create business case model for replacement/migration candidates
5. Determine scope of initial APM and execute APM process
6. Develop business cases for top replacement/migration candidates and socialize for approval/funding decisions

Estimated Duration	■ 3–4 months

Risks/Success Factors	Prerequisite Activities
■ Stakeholder buy-in to the process, particularly customers ■ Agreement on participants, governance and processes for APM ■ Quality of business cases and efficacy in driving budgeting decisions	■ None

Benefits	Costs
■ Defined process with customers for ongoing APM ■ Near-term replacement candidates with ROI	■ Internal Costs: $264K–$352K ■ External Costs: $275K–$375K

Contingency Plan	Follow-Up Actions
■ Identify top candidates for replacement due to cost, inability to meet business needs, etc.	■ Identify/secure funding for investment decisions driven by APM

Project	2. Investigate ICT Investment Augmentation	Program	A. Maximize Value of ICT

Objectives

- Explore funding opportunities for further investment in ICT to reach DTMB goals and achieve DTMB vision
- Reduce operational expenses/capital expense ratio and invest in ICT to achieve strategic goals

Addressed Recommendation Requirement(s)

- 4-1-5: DTMB must increase its ICT capital investments in order to refresh the State's legacy applications, improve the State's aging infrastructure and to become more in line with the capital expenditure/operating expenditure ratios of its peers

Deliverables

- Business case for increased funding
- Short-, medium- and long-term investment plan
- Business metrics for ongoing investment performance measurements

Scope	■ All ICT Assets, Resources and Services
Project Sponsor	■ CIO
Business Owner	■ CIO
Critical Team Members	■ Project Manager (quarter-time) ■ Budget Director ■ Chief Procurement Officer ■ DTMB Budget Office

High-Level Project Plan

1. Define business case and justification for additional investment
2. Explore options for additional funding streams
3. Develop investment planning and prioritization model
4. Define measureable and salient metrics for gauging performance

Estimated Duration	■ 2 months

Risks/Success Factors	Prerequisite Activities
■ Identification of funding streams ■ Approval of budget changes, as applicable ■ Justifiable plan for investment	■ Executive support

Benefits	Costs
■ Sustained funding for ICT transformation and increased value to customers ■ ROI model to exhibit benefits	■ Internal Costs: $88K ■ External Costs: $75K–$125K

Contingency Plan	Follow-Up Actions
■ Seek ICT-enabled cost-cutting measures or revenue-generation methods to increase investment funds	■ Manage funding and investment decisions ■ Report on success of investments

Project	3. Enforce Enterprise Architecture	Program	A. Maximize Value of ICT

Objectives

- Elevate importance and enforce Enterprise Architecture as an essential function for customer satisfaction and managing TCO
- Increase the EA scope to include coverage of data/information, integration, solution and business architecture
- Align the EA program to a standard industry EA methodology or EA framework

Addressed Recommendation Requirement(s)

- 2-4-2: DTMB must formally document enterprise architecture processes and standards
- 2-4-3: DTMB must ensure that enterprise architecture is included in the solution definition process

Deliverables

- Enterprise Architecture Future State Road Map
- Enterprise Architecture Communication Plan

Scope	■ All DTMB Solutions and Services
Project Sponsor	■ CIO
Business Owner	■ CTO
Critical Team Members	■ Project Manager (quarter-time) ■ Enterprise Architecture Team (half-time) ■ CTO ■ Agency/Infrastructure Services 1–2 (quarter-time)

High-Level Project Plan

1. Define vision, goals and scope of EA
2. Document target EA state for the State of Michigan
3. Articulate the value proposition and link to State business strategy
4. Identify KPIs for performance measurement
5. Identify stakeholder groups and develop communication plan

Estimated Duration: ■ 2–3 months

Risks/Success Factors

- Promoting business context and financial impact of EA
- Initial success of new EA model and customer value

Prerequisite Activities

- Project 9 — Establish the Chief Technology Officer (CTO) Organization

Benefits

- Lower TCO
- Foundational architecture for statewide initiatives (e.g., MIPage)
- Innovation improvements

Costs

- Internal Costs: $105K–$160K
- External Costs: $125K–$175K

Contingency Plan

- Promote solution definition successes and de-emphasize “policing” actions to demonstrate value

Follow-Up Actions

- Calibrate processes to customer alignment changes
- Promote customer successes and financial impact of EA

Project	4. Explore Cost-Saving and Value-Add Opportunities	Program	A. Maximize Value of ICT

Objectives

- Conduct analyses to capitalize on investment decisions that will lower costs or provide added value to the State
- Conduct Feasibility Study for Citizen-Centric Portal for All State Agency Public Data
- Further investigate data center sourcing options for best value
- Conduct call center analysis to ascertain optimization, consolidation and other cost-saving opportunities
- Perform network/broadband growth study to determine if future requirements require additional investment
- Assess the business value and growth strategy for MiCloud

Addressed Recommendation Requirement(s)

- 2-3-3: DTMB must work with its customers to assess the business need and requirements for customer self-service offerings
- 4-6-2: DTMB must understand evolving requirements for its data centers and networks, and must develop strategies that address increased or changing needs
- 4-6-3: DTMB must explore the possibility of consolidating call centers

Deliverables

- Citizen Portal Feasibility Study
- Data Center Sourcing Analysis
- Call Center Optimization Study
- Network/Broadband Capacity and Growth Analysis
- MiCloud Business Case and Growth Strategy

Scope	■ Internally and externally provided services/solutions
Project Sponsor	■ CIO
Business Owner	■ CTO
Critical Team Members	■ Project Manager (quarter-time) ■ Infrastructure Services: 2–3 (half-time) ■ Agency Services 2–3 (quarter-time) ■ ePMO ■ ICT Finance

High-Level Project Plan

1. Identify External Needs/Conduct Solicitation(s)
2. Define common model for analyses, where applicable
3. Define scopes of work and finalize contracts
4. Vet alternatives and associated ROI for each study
5. Implement recommendations

Estimated Duration: ■ 4–10 months

Risks/Success Factors	Prerequisite Activities
■ External assistance and expertise ■ Quality of analysis and ROI ■ Executive and budgetary support of findings	■ Project 5 — Redefine Customer Relationship Model ■ Project 6 — Establish Service Management Model

Benefits	Costs
■ Independent analyses for large-scale investment options ■ ROI to support decisions	■ Internal Costs: $352K–$880K ■ External Costs: $500K–$1M

Contingency Plan	Follow-Up Actions
■ Use available data and internal resources to determine which sub-project has highest viability, and pursue	■ Appropriate funding to implement recommendations, as appropriate

Program B: Transition to Target State Organizational Structure

Program Overview

Program B: Transition to Target State Organizational Structure

Program Overview

- Program B is focused on establishing an organizational structure that will improve customer alignment, service delivery, innovation, project portfolio management and resource allocation.
- The completion of Program B will facilitate the transition to the Target State Functional Model. The projects that comprise Program B are as follows:
  - B-5: Redefine Customer Relationship Model
  - B-6: Establish Service Management Model
  - B-7: Enhance Responsibilites and Capabilities of ePMO
  - B-8: Create Pooled Resources
  - B-9: Establish CTO Organization
  - B-10: Improve Capabilities to Retain and Attract Talented Resources.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

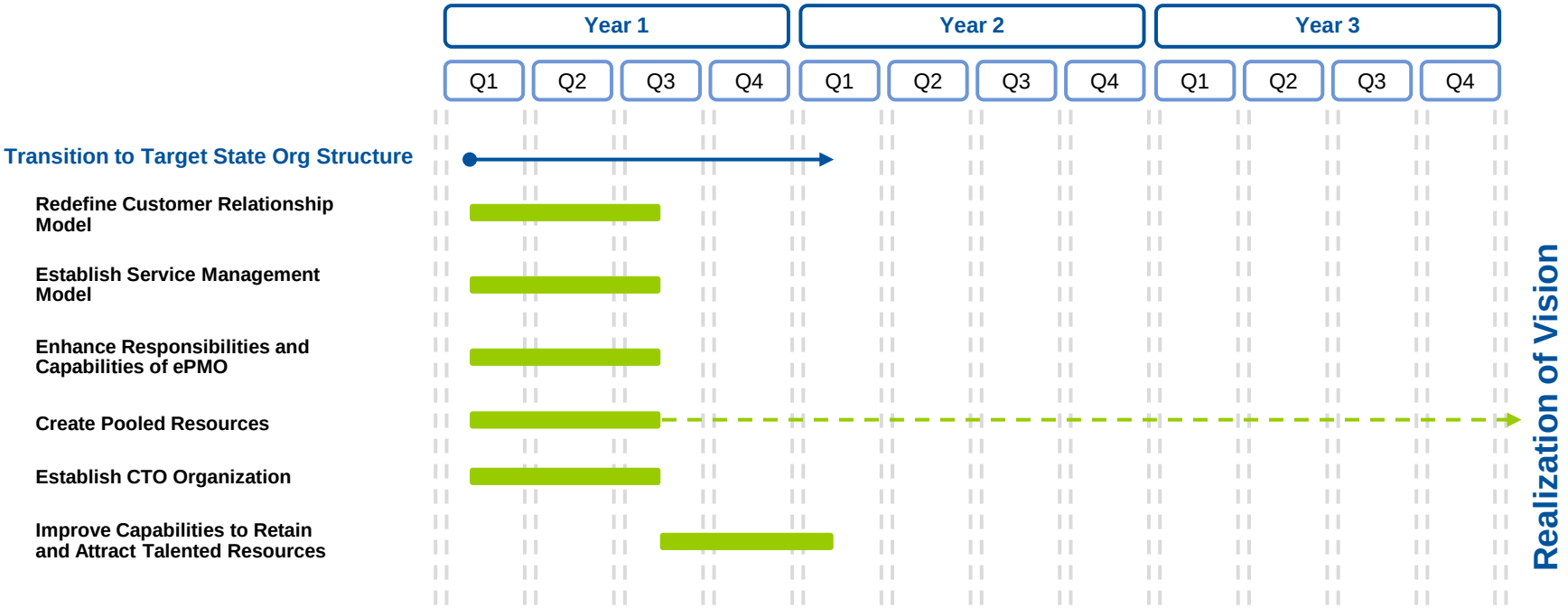
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $850K–$1.1M (est.) Internal Costs: $1.584M–$2.112M (est.) Potential Future Costs: ■ Continued pooling of resources during applicational rationalization	■ Improved alignment with customers ■ Improved service delivery ■ Improved resource allocation ■ Improved ICT staff capabilities ■ Ability to coordinate all State ICT projects ■ Proactive development of innovative solutions that responds to business needs ■ Improved solution consistency across the enterprise	■ RACI models ■ Revised organization charts ■ Transition road map for pooled resources ■ Customer service plans ■ Service management plans ■ Statewide innovation plan ■ Updated job titles and job descriptions for ICT

Program B: Transition to Target State Organizational Structure

Program Road Map

Program……
Project ……
Follow-On Tasks…

- DTMB should immediately begin Program B in order to modify the current organizational structure. After defining the roles and responsibilities within the organization, DTMB can update job titles and define career paths that map back to the expectations for each role. Also, DTMB will be better positioned to understand, develop and attract needed skills for the organization.



Program B: Transition to Target State Organizational Structure

- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - Organizational Changes
  - Target State Scenario A — First Day
  - Target State Scenario B — MiCloud
  - Target State Scenario C — Mobility
  - Project Charters.

Program B: Transition to Target State Organizational Structure

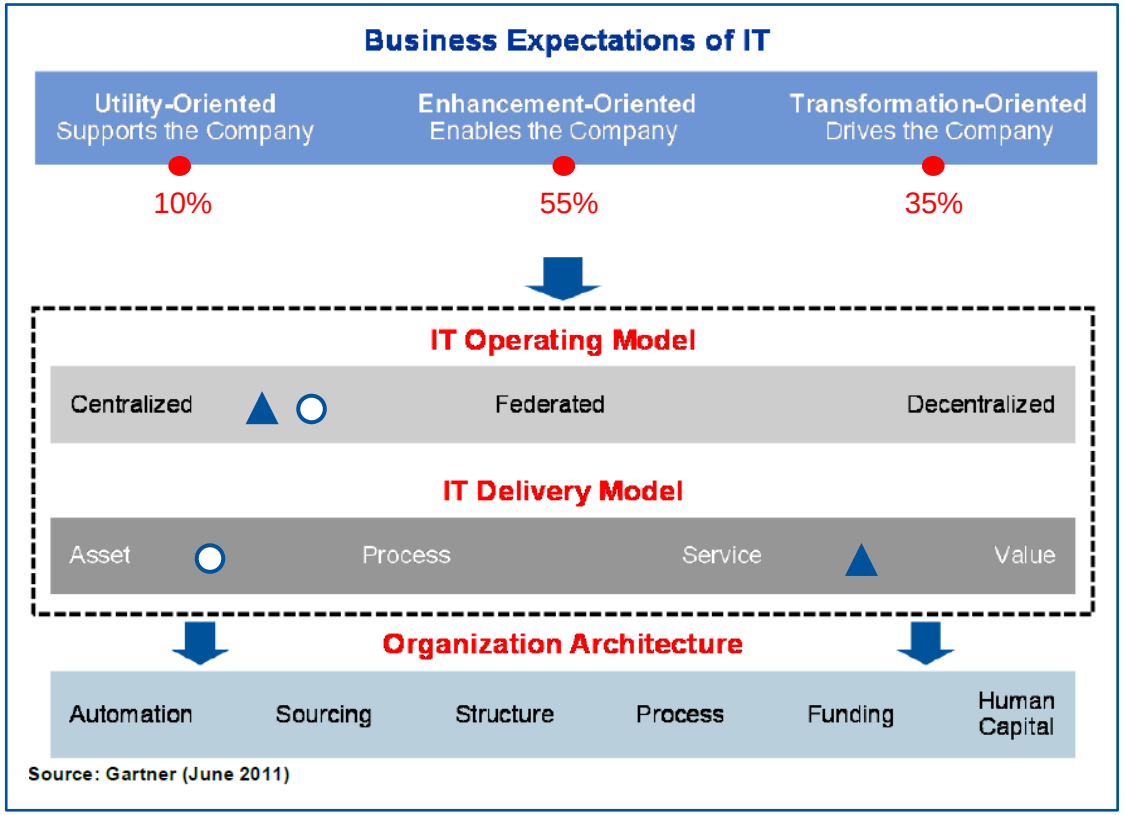
Organizational Changes

Program B: Transition to Target State Organizational Structure

Organizational Changes: Aligning with Business Expectations

Current State = ○
Target State = ▲

- Business Expectations of ICT:
  - A large majority of Michigan State agencies expect DTMB to enhance or transform their business
- IT Operating Model:
  - DTMB currently utilizes a centralized operating model with strong agency alignment
  - DTMB must strengthen its alignment to agencies from a customer service perspective, but it should further consolidate IT functions to achieve economies of scale across agencies
- IT Delivery Model:
  - DTMB's current delivery model falls somewhere between an Asset- and Process-optimized delivery model
  - DTMB's delivery model needs to move toward Service or Value to meet business expectations



DTMB's organizational architecture must be enhanced to accommodate a new ICT Delivery Model — this includes its current organizational structure.

Program B: Transition to Target State Organizational Structure

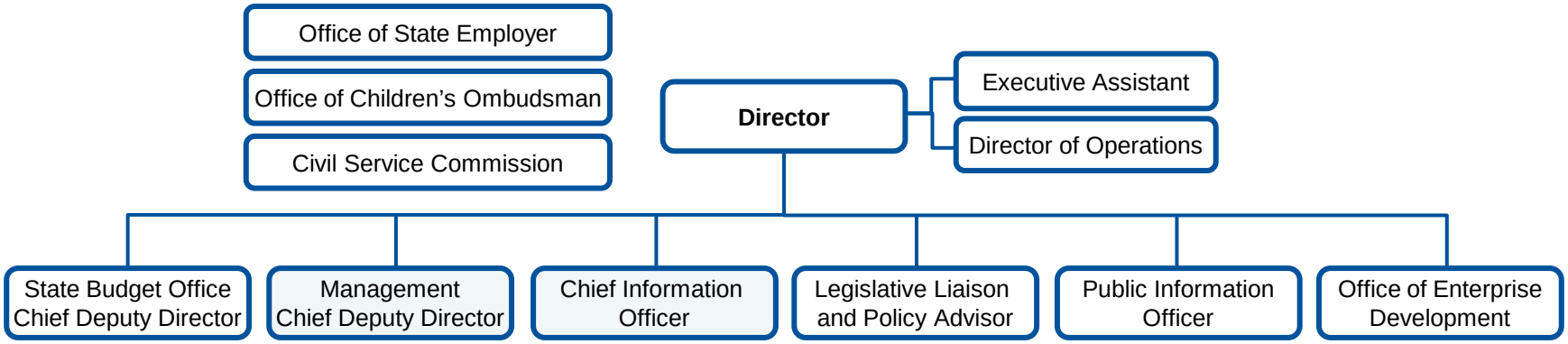
Organizational Changes: Approach

- In the process of conducting our assessment of DTMB, Gartner identified a number of organizational recommendations that can help DTMB become more effective in meetings its objectives.
- To assist DTMB in exploring potential organizational changes driven by these recommendations, Gartner has developed an example of a functional model that DTMB can utilize for future organizational planning.
- The resulting potential target state illustrates function and role changes that will better align DTMB with best practices.
- Beginning with a recapitulation of the current organizational model, a potential target model is provided, followed by key role expectations for the functions most impacted by the changes.
- It should be noted that this represents input toward a potential future model. Gartner recommends that DTMB pursue formal organizational design and change project activities to ensure the effectiveness and success of design and transition efforts.

Program B: Transition to Target State Organizational Structure

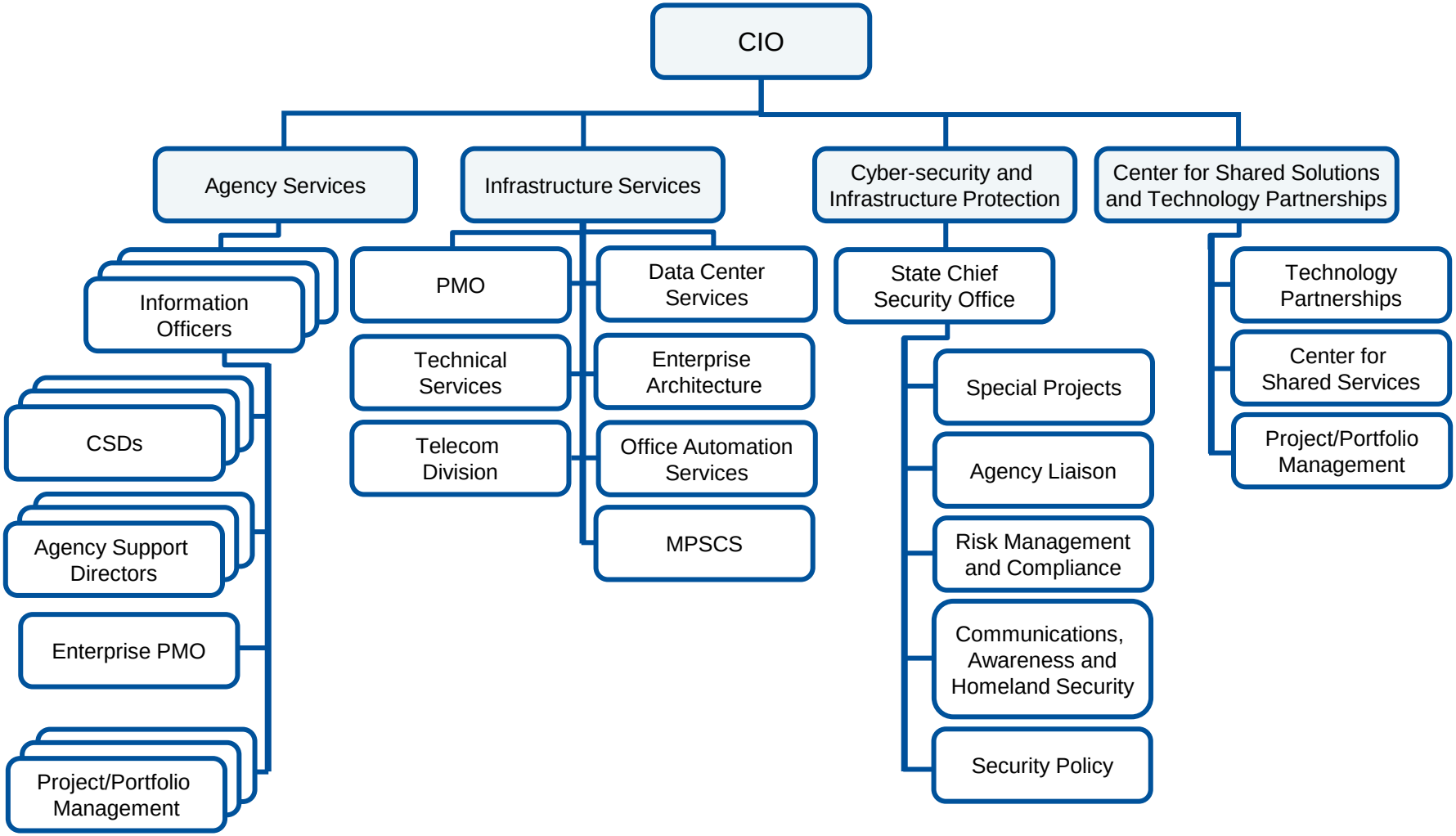
Organizational Changes: Current State DTMB Organizational Structure

- The primary focus of Gartner's analysis was the organization underneath the Chief Information Officer (CIO) and the IT procurement function that resides in Management, but the overall success of IT transformation in the State is contingent on all aspects of DTMB working together.



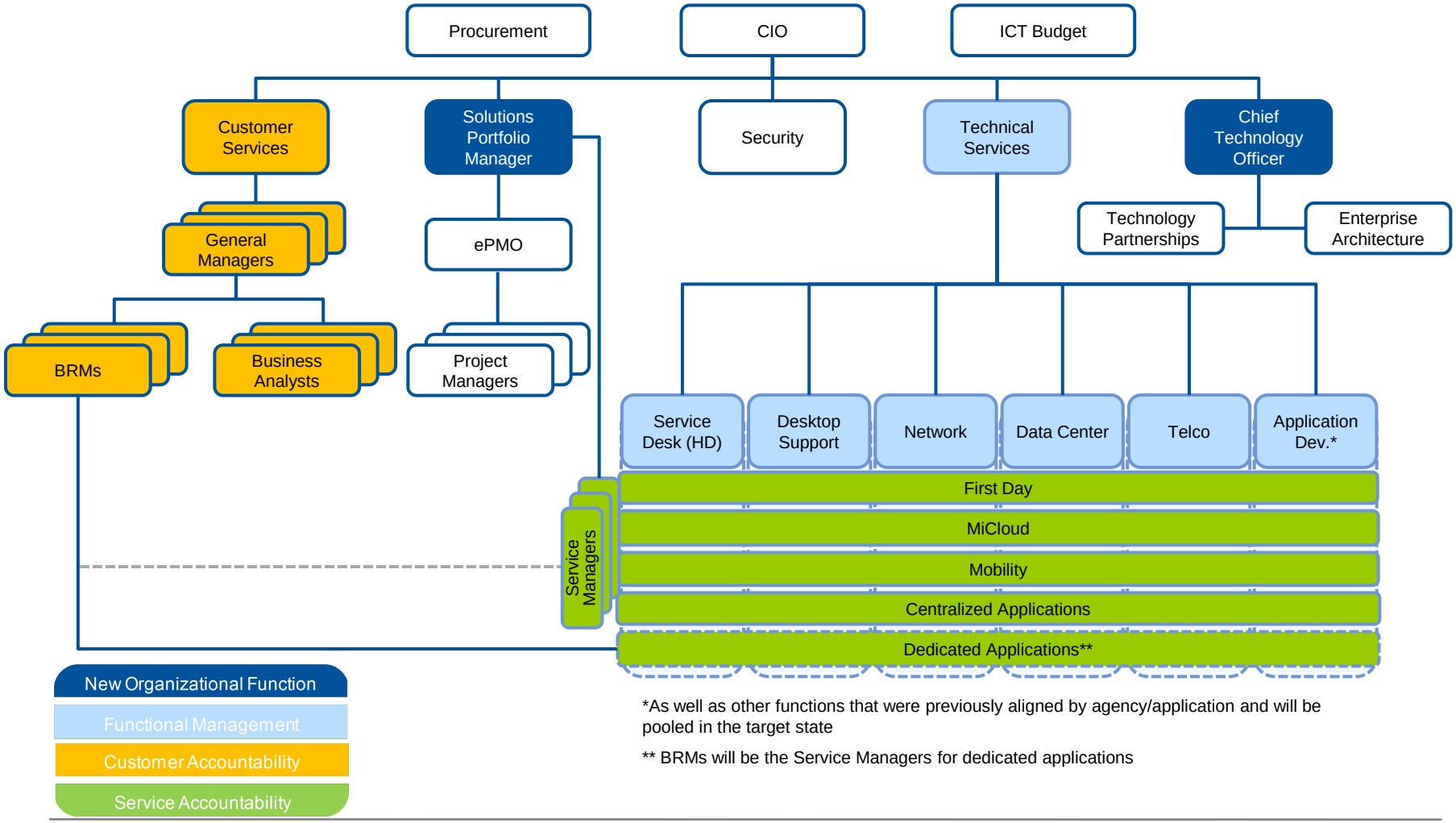
Program B: Transition to Target State Organizational Structure

Organizational Changes: Current State IT Organizational Structure



Program B: Transition to Target State Organizational Structure

Organizational Changes: Potential Target State



*As well as other functions that were previously aligned by agency/application and will be pooled in the target state

** BRMs will be the Service Managers for dedicated applications

Program B: Transition to Target State Organizational Structure

Organizational Changes: Glossary of New Roles

General Manager

The **General Manager** is the single point of accountability to customers. Works with the customer to develop ICT strategy and serves as liaison at the executive level. Measured by customer satisfaction and achievement of client business objectives.

Business Relationship Manager

The **Business Relationship Manager** reports to a single General Manager and is responsible for day-to-day customer delivery and satisfaction. Interacts with service managers for ongoing services and can serve as Service Manager for dedicated client applications. Interacts with other internal resources (ePMO, EA, etc.) to support customer.

Business Analyst

The **Business Analyst** reports to a single General Manager and can complement customer business analyst resources. Provides business analysis services in support of customer objectives such as requirements definition, documentation and testing support.

Solutions Portfolio Manager

The **Solutions Portfolio Manager** is responsible for service definition and service sourcing decisions. Works with procurement, CTO, customer service and other areas to monitor service performance and value, and to make ongoing delivery and investment decisions.

Service Manager

The **Service Manager** is responsible for a defined service, and for meeting customer demand and SLAs. Works with Solutions Portfolio Managers, Business Relationship Managers, General Managers, the ePMO and other internal groups to deliver high-quality and cost-effective services to customers.

Program B: Transition to Target State Organizational Structure

Organizational Changes: Achieving Target State Requires Bolstering Key Job Families

Job Family	Highly Qualified	Qualified	Less-Qualified	Total HC	Strength (%HQ+Q)	Rank
Client Technology/Desktop Support	31	38	32	101	68%	High
Web Administration	4	3	5	12	58%	
Quality Assurance	7	4	10	21	52%	
Systems Administration	25	14	43	82	48%	
Application Development	48	78	163	289	44%	
Network Management	6	7	19	32	41%	
Database Analysis	2	3	8	13	38%	Med
Database Administration	14	7	35	56	38%	
Web Design	5	8	22	35	37%	
TeleCommunications	7	8	32	47	32%	
IT Security	2	5	15	22	32%	
→ Business Analysis	3	13	37	53	30%	
Architecture	3	6	22	31	29%	Low
Business Intelligence	1	3	10	14	29%	
→ Project Management	12	16	80	108	26%	
Customer Support/Help Desk	4	19	66	89	26%	
Computer Operations	1	12	46	59	22%	
→ IT Leadership	10	17	96	123	22%	
Business Continuance	1	0	4	5	20%	
Release Management	1	1	8	10	20%	
→ Relationship Management	2	1	38	41	7%	

Program B: Transition to Target State Organizational Structure

Organizational Changes: Potential Target State Scenarios Introduction

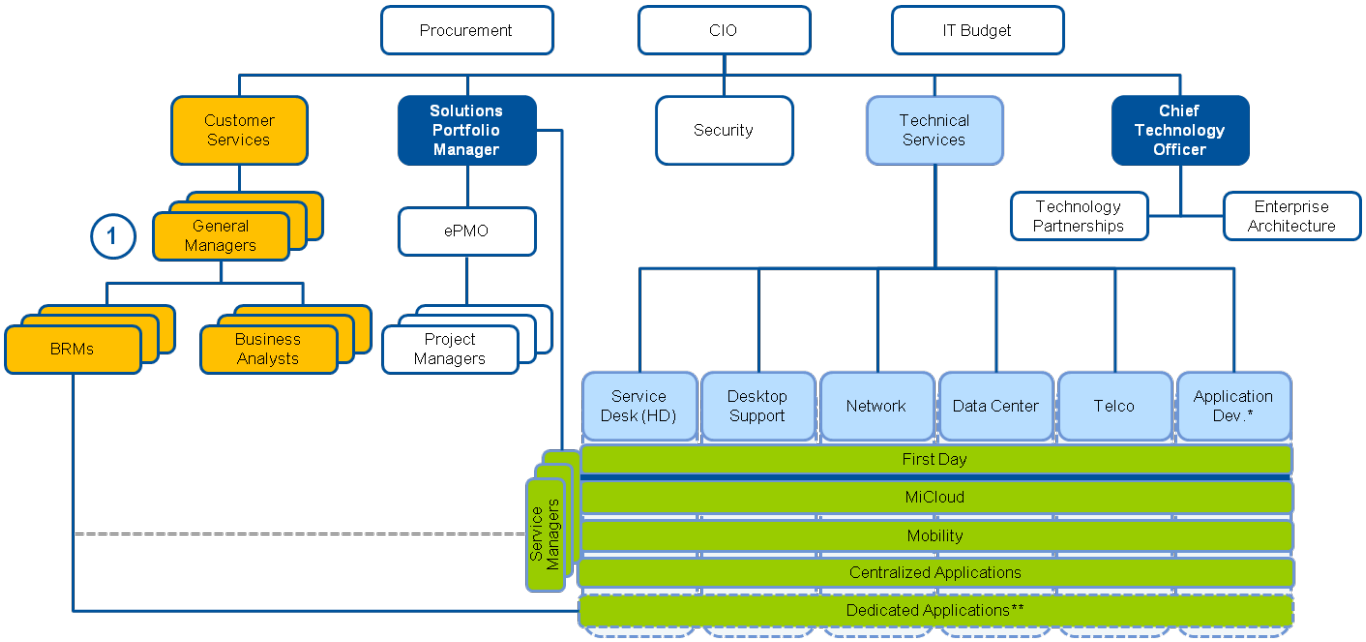
- Several “real-life” scenarios were developed to help illustrate how key processes will be executed in the target state model.
- The scenarios are approached from a service perspective, meaning that the illustration will briefly describe each step from customer interaction to service delivery.
- The three scenarios developed are:
  - First Day — Established service implemented into the new model
  - MiCloud — Nascent service with potential for expansion
  - Mobility — Untapped customer need that needs service definition

Program B: Transition to Target State Organizational Structure

Potential Target State Scenario A — First Day

Program B: Transition to Target State Organizational Structure

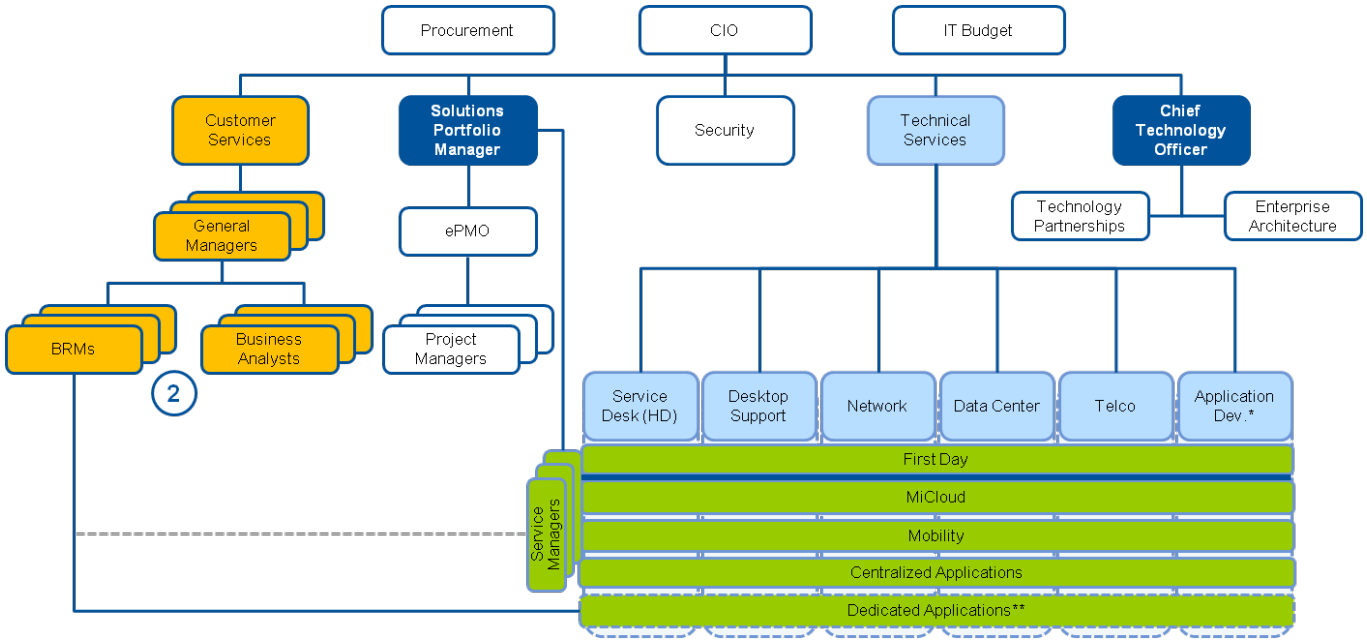
Potential Target State Scenario A — First Day



- Customer informs General Manager that several new employees have been hired and will begin employment in several weeks.
- General Manager confirms pricing and service-level agreements with customer as defined in the Services Catalog.
- First Day clock “starts ticking.”

Program B: Transition to Target State Organizational Structure

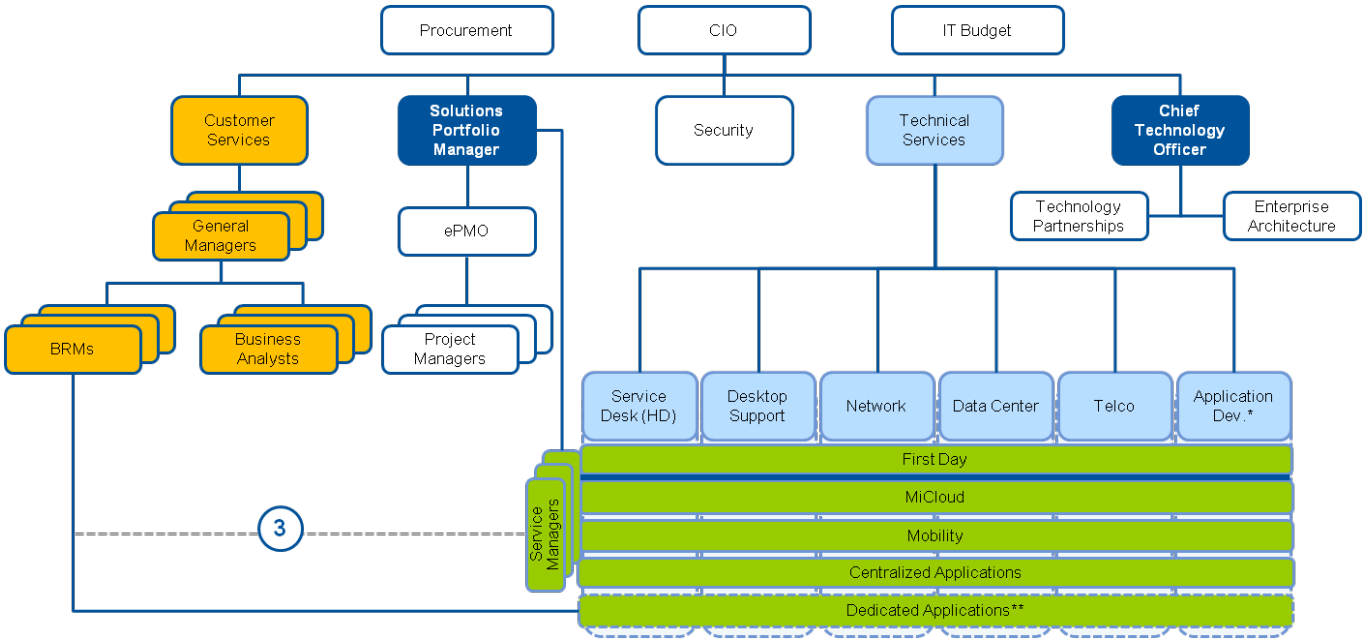
Potential Target State Scenario A — First Day (Cont'd)



- General Manager delegates task to Business Relationship Manager, who assumes operational execution of the task.

Program B: Transition to Target State Organizational Structure

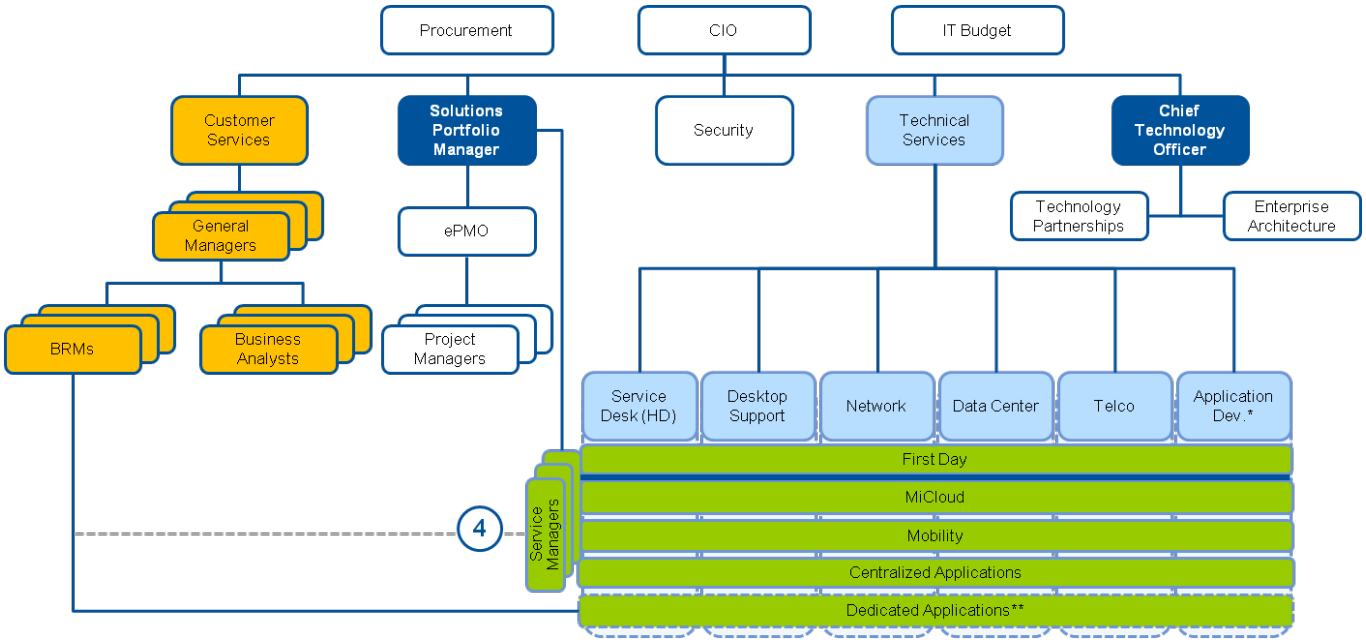
Potential Target State Scenario A — First Day (Cont'd)



- Business Relationship Manager liaises with the First Day service manager, as defined in the service catalog, and per process and responsibilities defined in Operating Level Agreements.
  - This interaction may be facilitated by the Business Relationship Manager entering a ticket into the Service Desk system
  - General Managers, Business Relationship Managers and customers may access the status of their First Day order online

Program B: Transition to Target State Organizational Structure

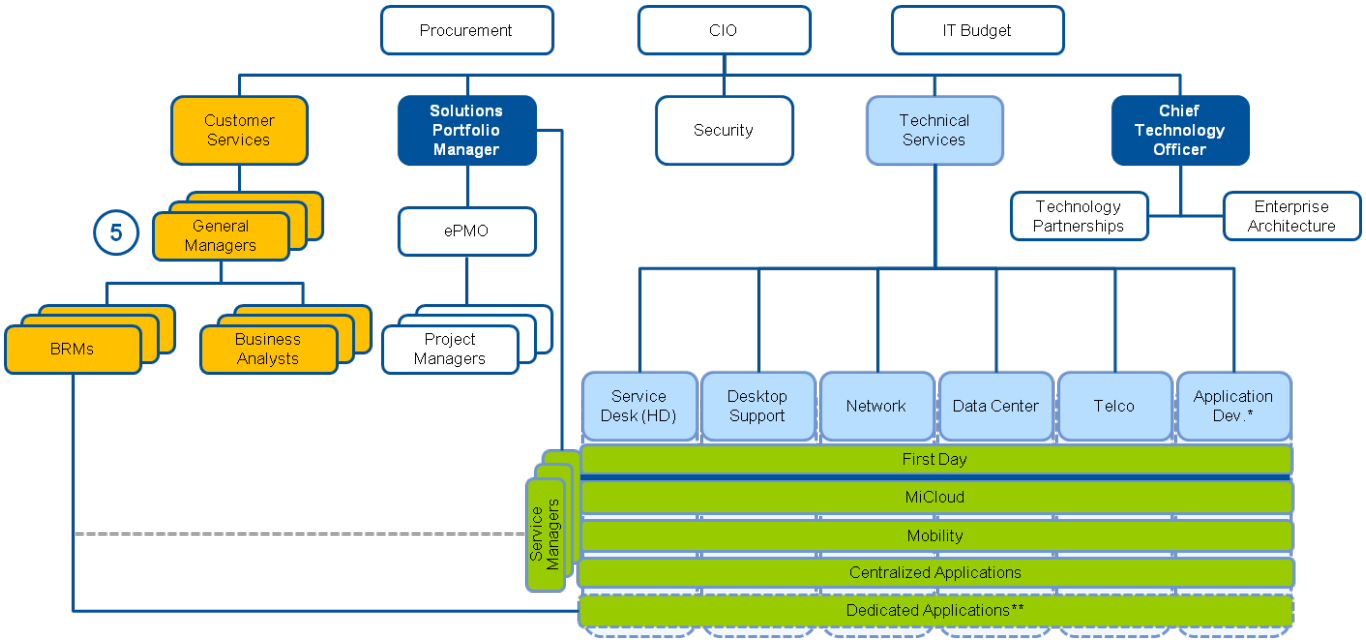
Potential Target State Scenario A — First Day (Cont'd)



- The Service Manager oversees the First Day service by working with the different technical towers via existing Operating Level Agreements. Technical towers potentially impacted may include: Desktop Support, Network, Telecom and Security.
- The First Day process is completed and the General Manager and BRM are notified.

Program B: Transition to Target State Organizational Structure

Potential Target State Scenario A — First Day (Cont'd)



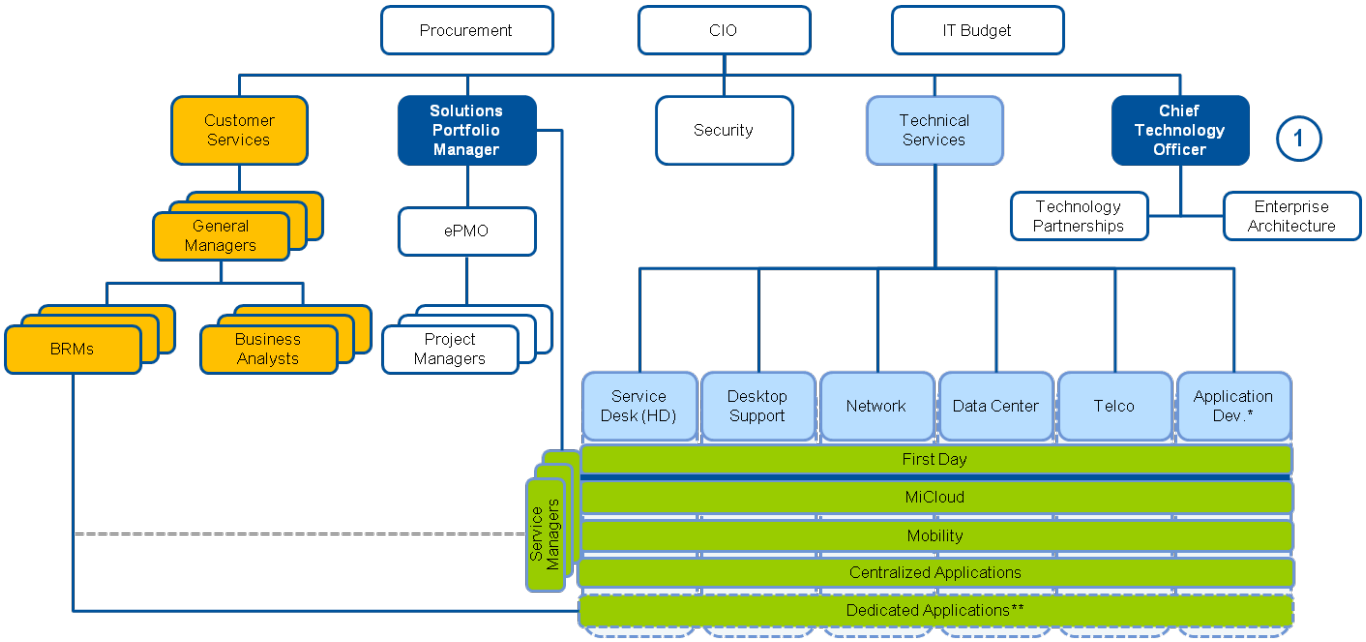
- General Manager completes process with the customer(s) and measures performance against SLAs and from a customer service standpoint. "First Day clock" stops upon customer approval.
- General Managers maintain metrics of service performance to periodically review with customers and will be proactive about administering customer satisfaction surveys.
- Feedback formally communicated back through the organization; key metrics elevate to dashboard for CIO.

Program B: Transition to Target State Organizational Structure

Potential Target State Scenario B — MiCloud

Program B: Transition to Target State Organizational Structure

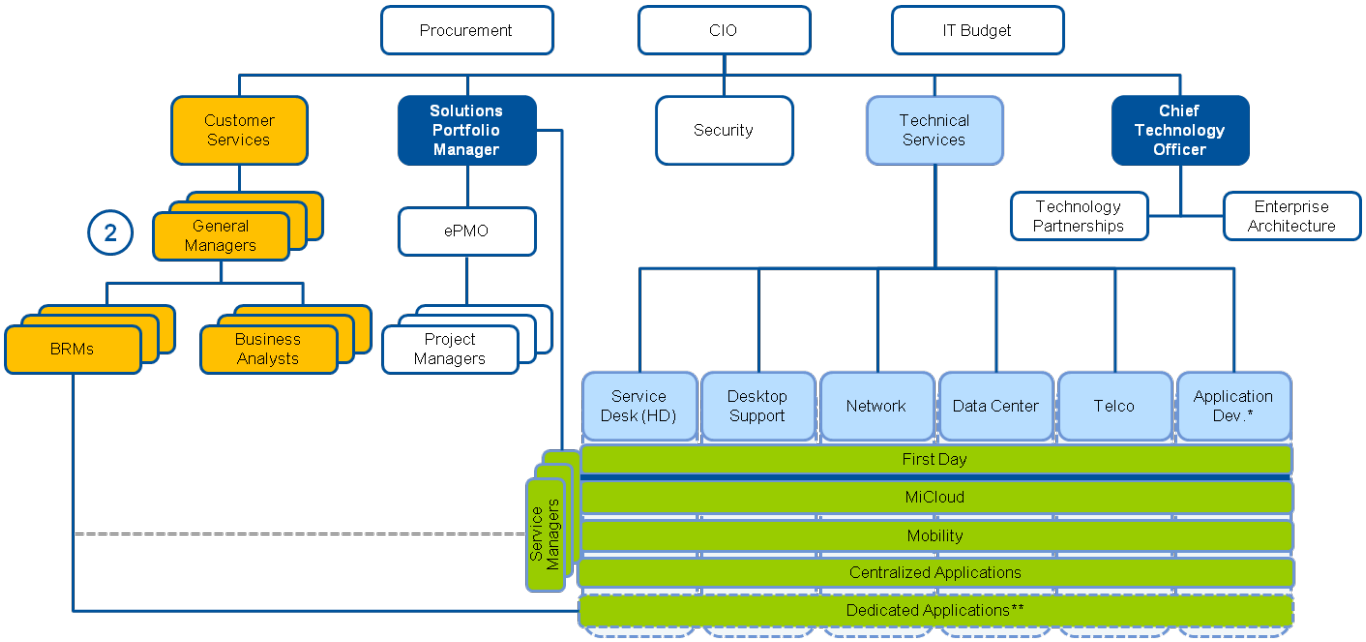
Potential Target State Scenario B — MiCloud



- Solutions Portfolio Manager and appropriate Service Manager work with CTO to gauge technological possibilities, trends and options for second iteration of MiCloud.

Program B: Transition to Target State Organizational Structure

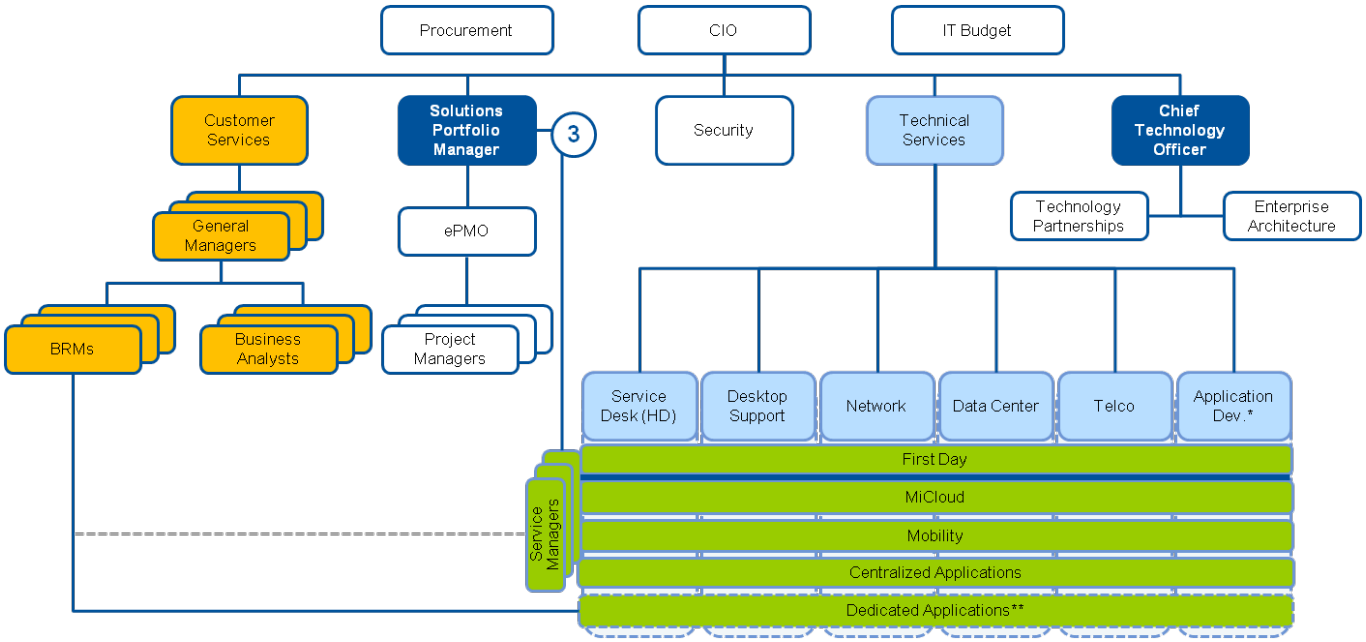
Potential Target State Scenario B — MiCloud (Cont'd)



- General Managers engage customers to gauge current and future cloud needs, documented by BRMs and business analysts.

Program B: Transition to Target State Organizational Structure

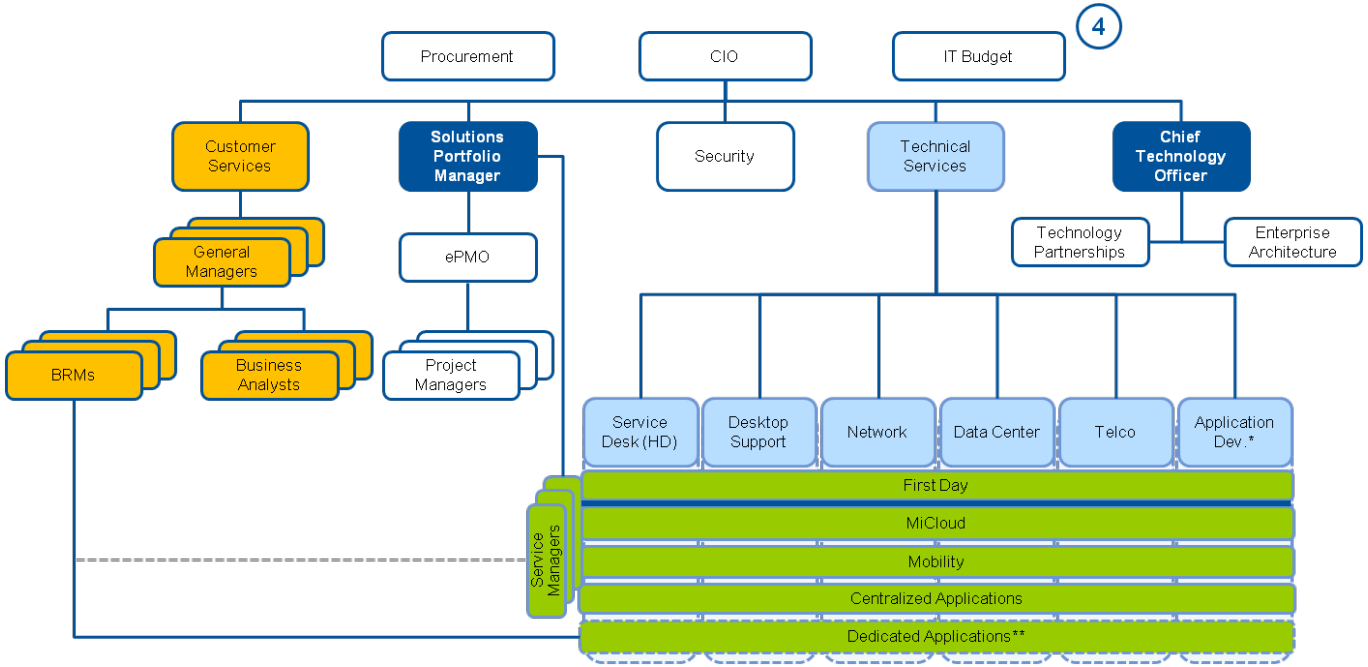
Potential Target State Scenario B — MiCloud (Cont'd)



- General Managers, BRMs, Business Analysts, Solutions Portfolio Manager, Service Manager and Enterprise Architect balance customer requirements with technology direction and options to define future state MiCloud and tactical plan for advancing to target state.
- Decision could lead to no change to current service, modification (e.g., broader offerings, multiple tiers of service, etc.), or retirement of service.

Program B: Transition to Target State Organizational Structure

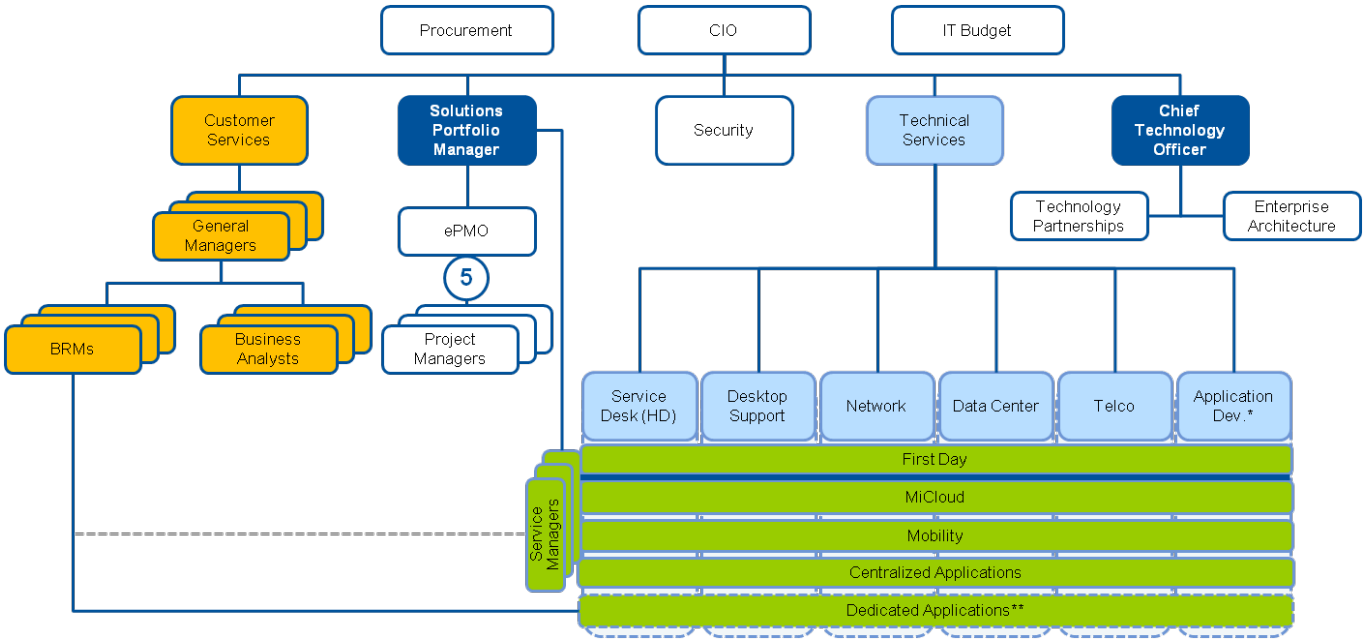
Potential Target State Scenario B — MiCloud (Cont'd)



- A formal business case for modifying MiCloud (as warranted) is prepared and submitted to DTMB for investment approval. If approved, the project is assigned a fixed project budget.

Program B: Transition to Target State Organizational Structure

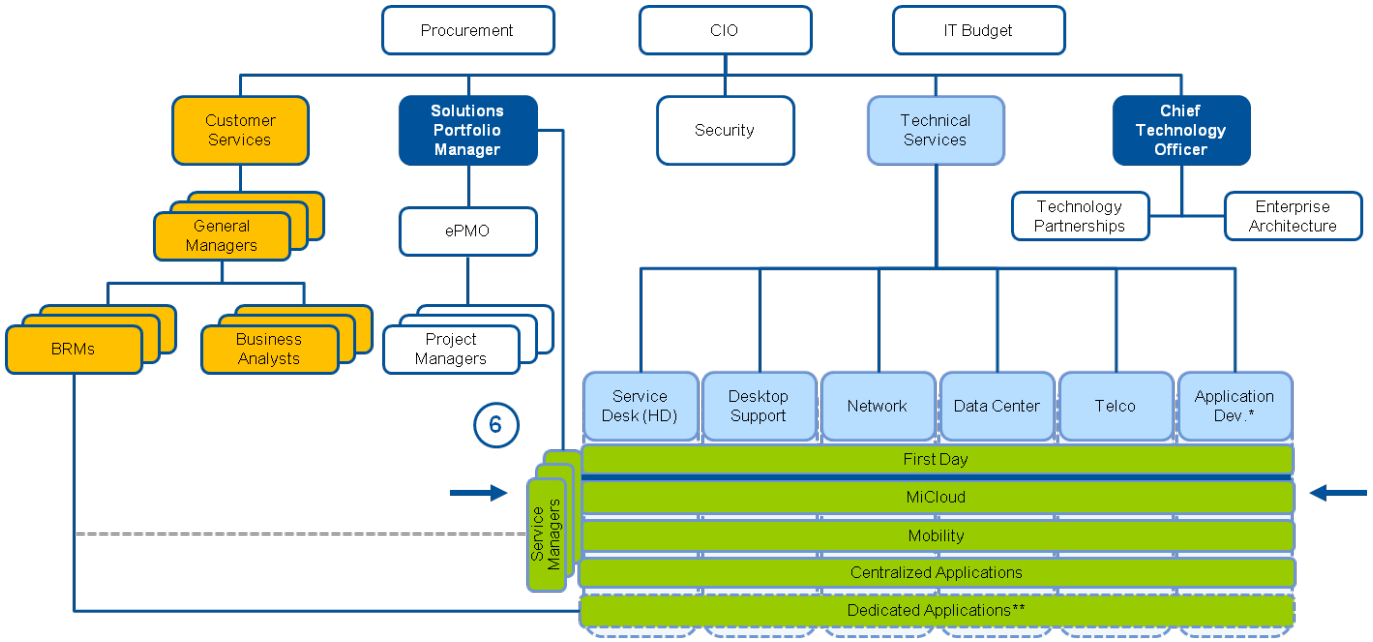
Potential Target State Scenario B — MiCloud (Cont'd)



- The ePMO prioritizes the MiCloud enhancement project in the enterprise project portfolio so that resource allocation planning can be performed. Budget, resource, scheduling and other key baseline information submitted to ePMO for tracking and oversight.

Program B: Transition to Target State Organizational Structure

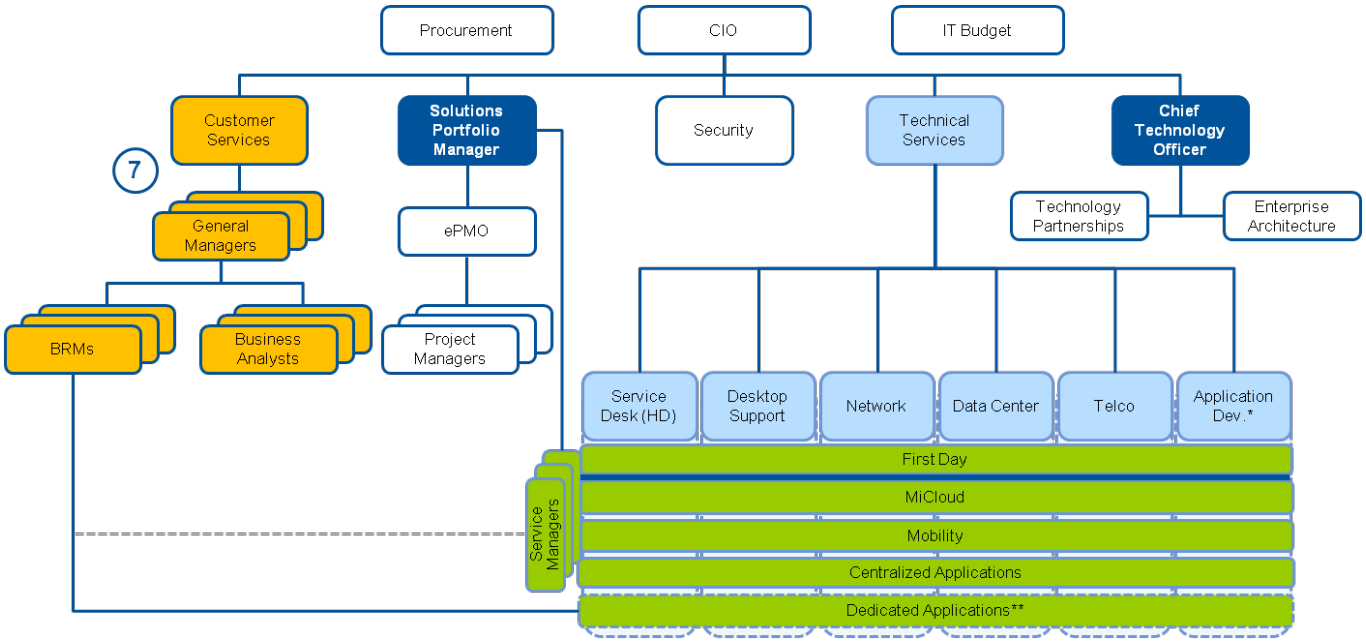
Potential Target State Scenario B — MiCloud (Cont'd)



- A project is executed to develop and/or procure enhanced MiCloud service as defined in the detailed design.
- Operating level agreements are developed for the service.

Program B: Transition to Target State Organizational Structure

Potential Target State Scenario B — MiCloud (Cont'd)



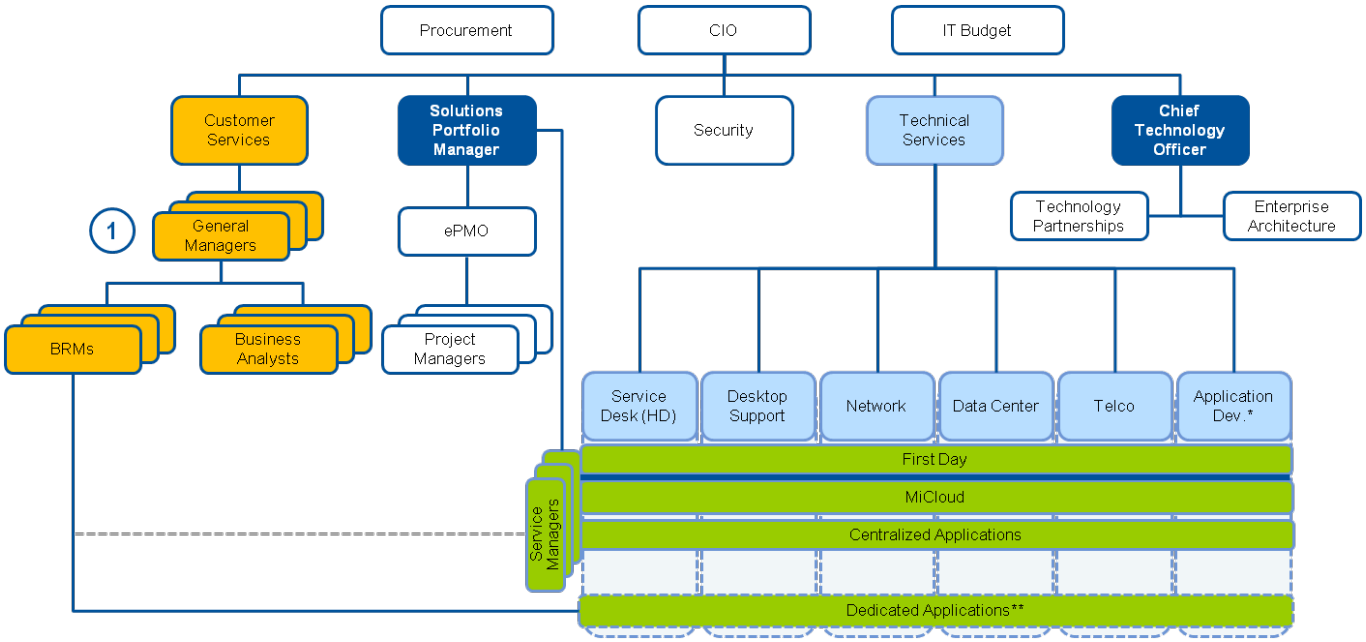
- General Managers complete process with the customer(s) and measures performance against SLAs and from a customer service standpoint.
- General Managers maintain metrics of service performance, feedback formally communicated back through the organization, key metrics elevate to dashboard for CIO.
- Changes to MiCloud service reflected in the service catalog with defined service levels and rates.
- Modified service is marketed to existing and potential clients per marketing strategy.

Program B: Transition to Target State Organizational Structure

Potential Target State Scenario C — Mobility

Program B: Transition to Target State Organizational Structure

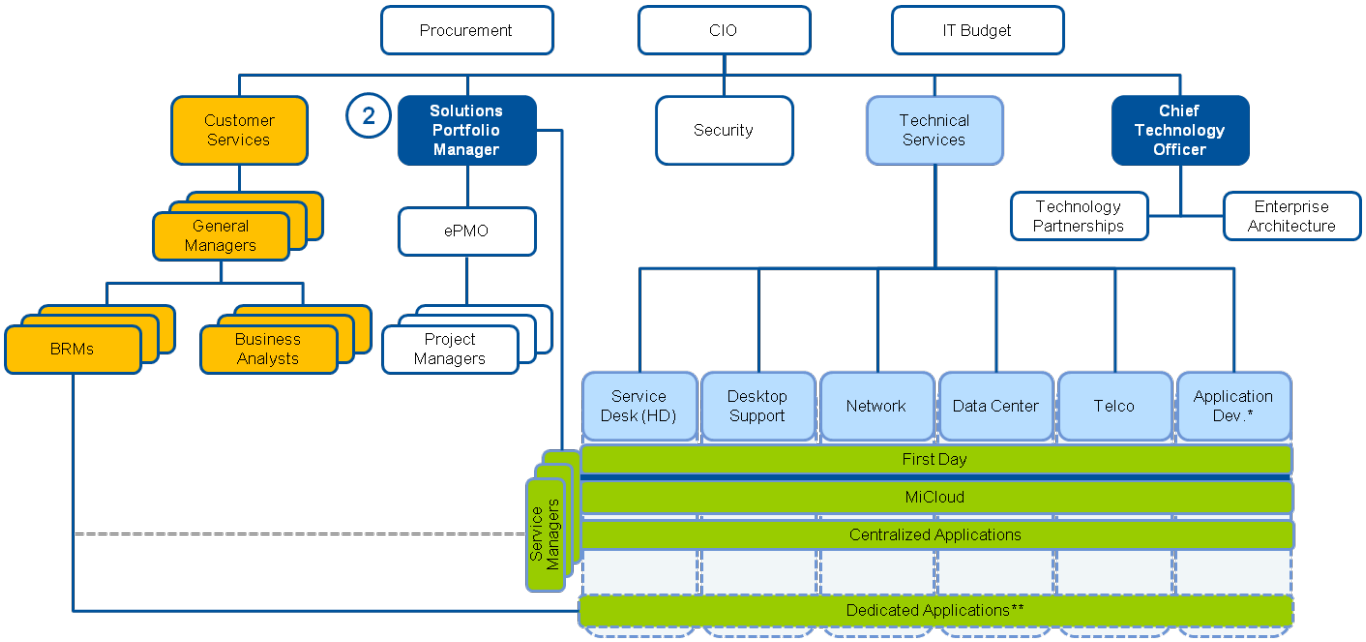
Potential Target State Scenario C — Mobility



- Customer informs General Manager of the need for a case management system that can be accessed in the field and utilized by case workers to increase efficiency. Mobility clock “starts ticking.”
- General Manager consults with Business Analyst to define high-level functional requirements for a mobile case management solution, and validates them with the customer.
- General Manager works with the Solutions Portfolio Manager to determine if an existing service on the service catalog will meet the high-level functional requirements.

Program B: Transition to Target State Organizational Structure

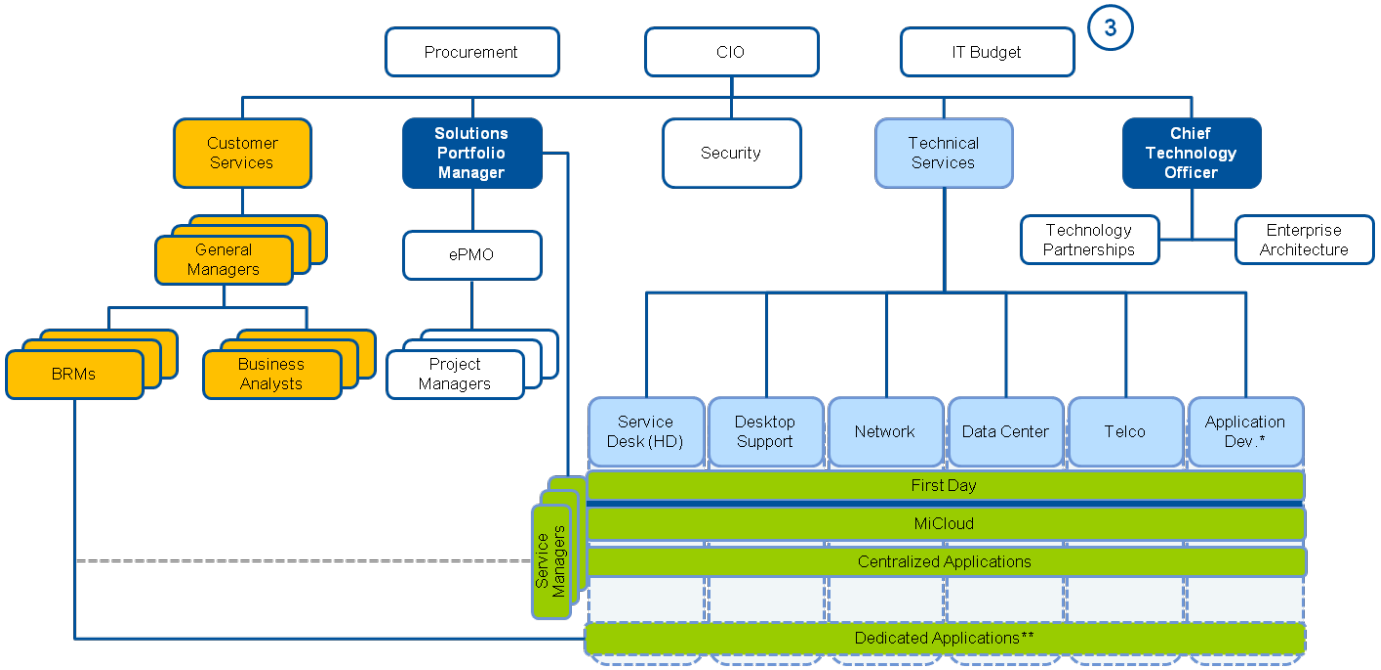
Potential Target State Scenario C — Mobility (Cont'd)



- The Solutions Portfolio Manager determines that no existing service meets the customer request and instructs the ePMO to assign a project manager to manage the definition of a mobility solution.
- Other customers are contacted to gauge interest in the defined high-level functional requirements. Customer(s) are selected to sponsor the proposed project.
- The Project Manager convenes a team composed of BAs (perhaps for more than one customer), CTO, the Enterprise Architect, Security, ICT Finance, Procurement and technology towers to clearly define the solution so that high-level benefits and costs estimates can be prepared.

Program B: Transition to Target State Organizational Structure

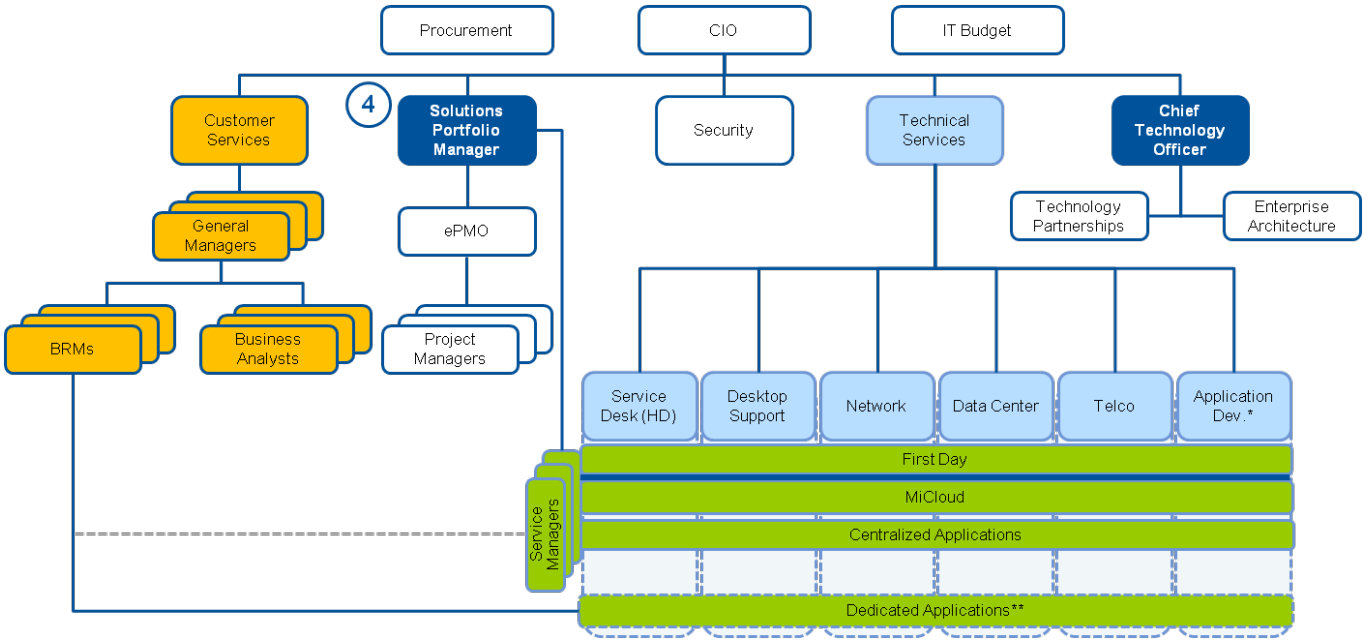
Potential Target State Scenario C — Mobility (Cont'd)



- A formal business case for mobility is prepared and submitted to DTMB for investment approval. If approved, the project is assigned a fixed project budget.

Program B: Transition to Target State Organizational Structure

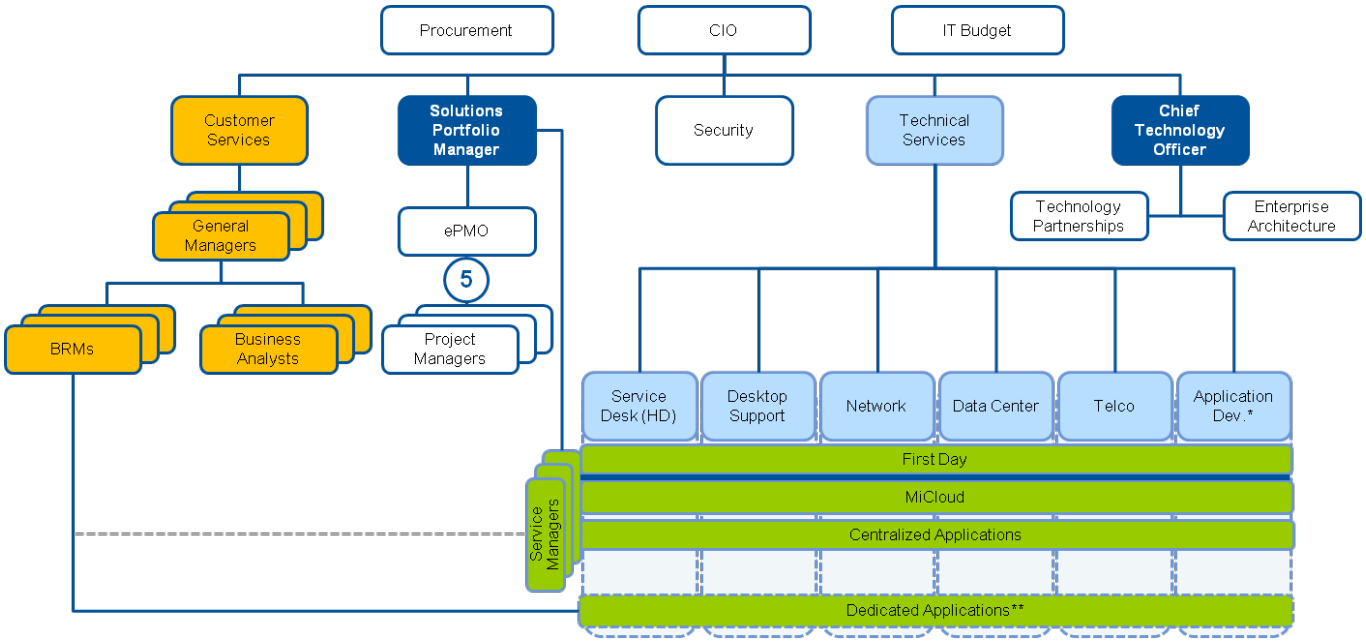
Potential Target State Scenario C — Mobility (Cont'd)



- The Solutions Portfolio Manager determines if this is an enterprise service or a solution dedicated to a single customer. If it is an enterprise solution, a Mobility Service Manager is defined. If it is dedicated to a customer, the BRM acts as the Service Manager.

Program B: Transition to Target State Organizational Structure

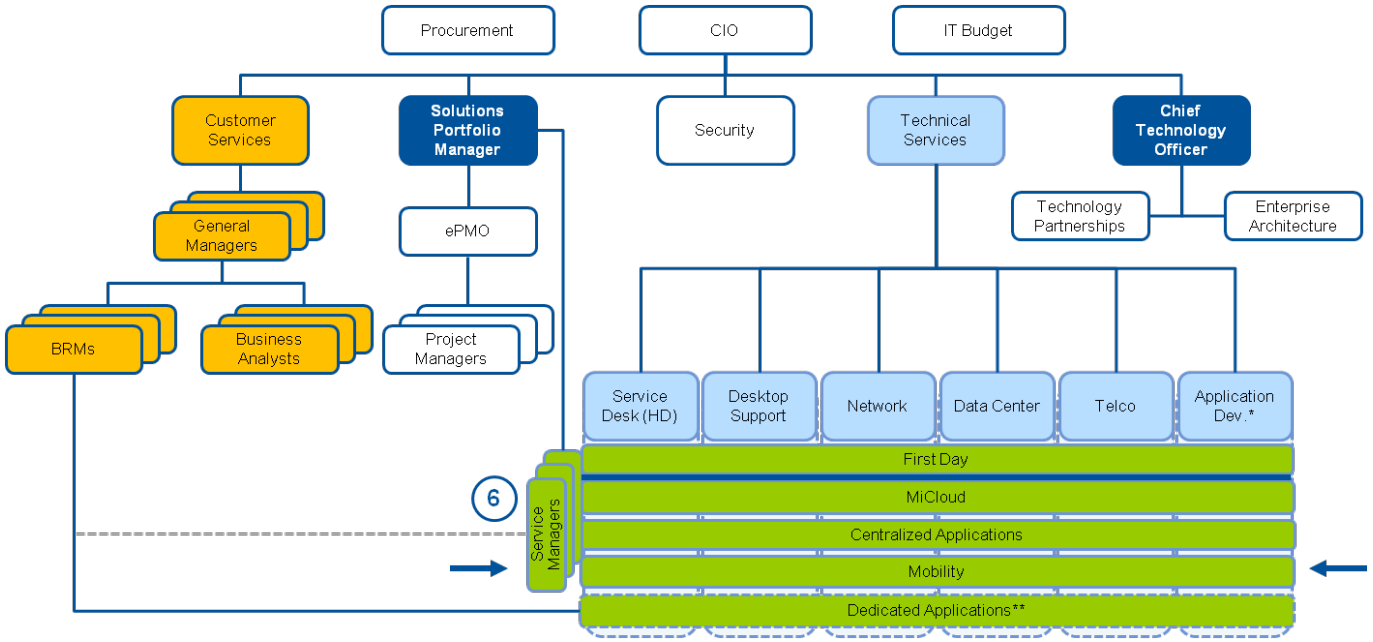
Potential Target State Scenario C — Mobility (Cont'd)



- The ePMO prioritizes the approved mobility project in the enterprise project portfolio so that resource allocation planning can be performed. Budget, resource, scheduling and other key baseline information is submitted to ePMO for tracking and oversight.
- In this instance, mobility is an enterprise solution, so the Project Manager re-convenes the team composed of the Service Manager, Business Analysts, CTO, the Enterprise Architect, Security, ICT Finance, Procurement and technology towers to perform detailed solution design and to make sourcing decisions for the solution.

Program B: Transition to Target State Organizational Structure

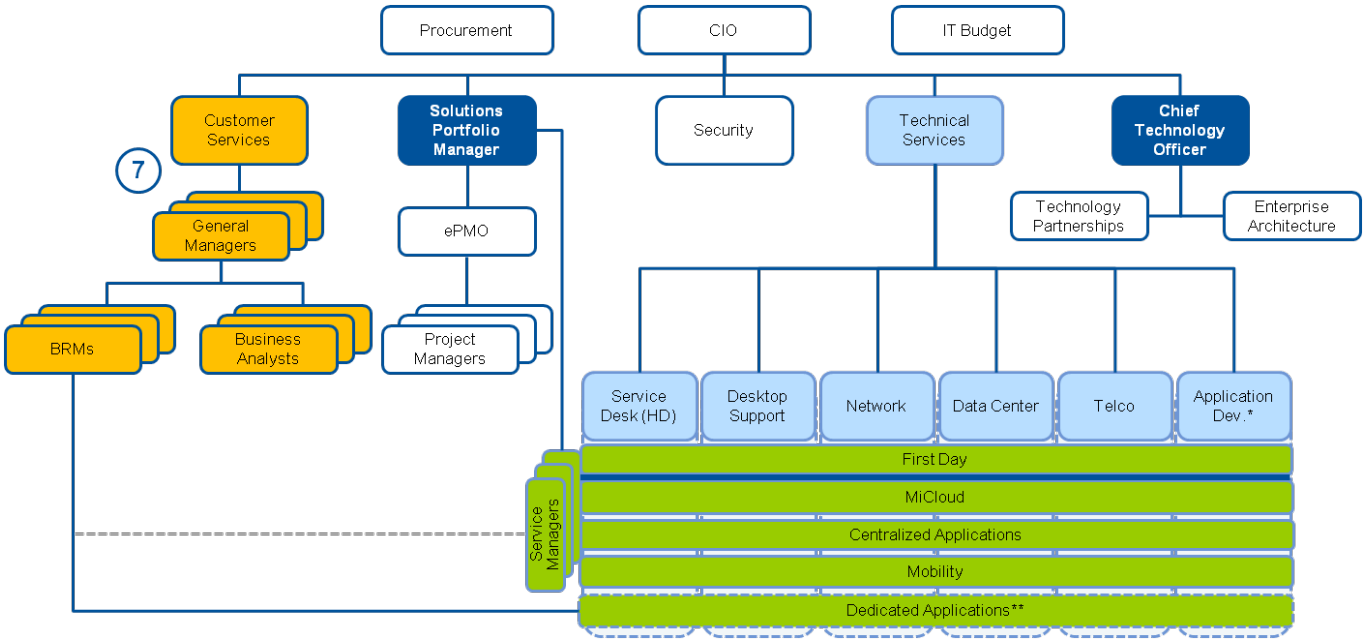
Potential Target State Scenario C — Mobility (Cont'd)



- A project is executed to develop and/or procure the mobility solution as defined in the detailed design.
- Operating level agreements are developed for the service.

Program B: Transition to Target State Organizational Structure

Potential Target State Scenario C — Mobility (Cont'd)



- General Manager completes process with the customer(s) and measures performance against SLAs and from a customer service standpoint. Clock stops.
- General Managers maintain metrics of service performance; feedback formally communicated back through the organization; key metrics elevate to dashboard for CIO.
- Mobility is added as a service to the service catalog with defined service levels and rates.
- New service is marketed to existing and potential clients per marketing strategy.

Program B: Transition to Target State Organizational Structure

Project Charters

Project	5. Redefine Customer Relationship Model	Program	B. Transition to Target State Organizational Structure

Objectives

- To clearly define the roles and responsibilities within DTMB's customer relationship model
- To establish a role that allows DTMB to understand the business needs of its customers (a business analyst)

Addressed Recommendation Requirement(s)

- 1-1-2: DTMB must clearly define the roles and responsibilities within its customer service model
- 1-1-3: DTMB must establish the role of a business analyst who is responsible for understanding the business of its customers

Deliverables

- A RACI model that defines customer relationship management roles and responsibilities
- A revised organization chart that describes the new customer relationship management model
- Customer service plans for each customer

Scope	■ The existing Agency Services organization
Project Sponsor	■ CIO
Business Owner	■ Agency Services Lead
Critical Team Members	■ Project Manager (quarter-time) ■ Agency Services: 2–4 (half-time) ■ ICT Finance

High-Level Project Plan

1. Define the required processes for a DTMB customer relationship organization
2. Define the role of a business analyst
3. Define and document the RACI for the identified customer relationship management processes
4. Conduct a pilot for the customer relationship management process
5. Appropriately staff the revised customer relationship model
6. General Managers will prepare customer service plans for each customer

Estimated Duration	■ 3–4 months to define the RACI model

Risks/Success Factors	Prerequisite Activities
■ Civil Service rules prohibit desired changes ■ Coordination between business units will be required	■ None

Benefits	Costs
■ Improved alignment with customers	■ Internal Costs: $264K–$352K ■ External Costs: $150K–$200K

Contingency Plan	Follow-Up Actions
■ Clearly define the roles of the existing IO and the CSDs ■ Establish OLAs within the current organizational structure	■ General Managers will periodically measure progress against customer service plans

Project	6. Establish Service Management Model	Program	B. Transition to Target State Organizational Structure

Objectives

- To clearly define the roles and responsibilities within DTMB's service management model — this includes the Solutions Portfolio Manager and Service Managers
- To define operating level agreements between Service Management and Customer Relationship Management, Infrastructure Services, ePMO, CTO, Enterprise Architect, Security and Procurement

Addressed Recommendation Requirement(s)

- 2-2-1: DTMB must define a service delivery model that defines how services and solutions will be provided to customers
- 2-2-2: DTMB must clearly define the roles and responsibilities within its service delivery model
- 2-2-3: DTMB must establish the role of a Service Manager who is responsible for coordinating and delivering a specific service on the enterprise service catalog

Deliverables

- A RACI model that defines services management roles and responsibilities
- A revised organization chart that describes the new service management model
- Service management plans for each service

Scope	■ All services provided by DTMB
Project Sponsor	■ CIO
Business Owner	■ Solution Portfolio Manager
Critical Team Members	■ Project Manager (quarter-time) ■ Agency Services: 2–4 (half-time) ■ Infrastructure Services ■ ePMO ■ CTO and Enterprise Architect ■ Security ■ Procurement ■ ICT Finance

High-Level Project Plan

1. Define the required processes for a DTMB services management organization
2. Define and document the RACI for the identified services management processes
3. Conduct a pilot test for a service
4. Install Service Managers for each service
5. Service Managers will develop a Service Management Plan for each service

Estimated Duration	■ 3–4 months to define the RACI model

Risks/Success Factors	Prerequisite Activities
■ Civil Service rules prohibit desired changes ■ Coordination between business units will be required	■ N/A

Benefits	Costs
■ Improved service delivery	■ Internal Costs: $264K–$352K ■ External Costs: $150K–$200K

Contingency Plan	Follow-Up Actions
■ Establish OLAs within the current organizational structure	■ Service Managers will review service management plans with General Managers, CTO and EA

Project	7. Create Pooled Resources	Program	B. Transition to Target State Organizational Structure

Objectives

- To better leverage the skill sets of DTMB employees across the State

Addressed Recommendation Requirement(s)

- 4-2-1: DTMB must define and implement centers of excellence (COEs) and pooled resource groups across all agencies in Agency Services

Deliverables

- A RACI model that defines the new pooled resources
- A revised organization chart that describes the new pooled resources
- Transition plan to pooled resources

Scope	■ All services provided by DTMB
Project Sponsor	■ Infrastructure Services
Business Owner	■ Infrastructure Services
Critical Team Members	■ Project Manager (quarter-time) ■ Agency Services: 2–4 (half-time) ■ Infrastructure Services ■ ePMO ■ CTO and Enterprise Architect ■ Security ■ Procurement ■ ICT Finance

High-Level Project Plan

1. Idenity pooled resources that can immediately be formed (e.g., DBAs)
2. Conduct a pilot test for pooled resources that incorporates the resource allocation processs from Project 18 — Improve Project Portfolio Management
3. Identify future pooled resources and a transition road map to pooling the necessary resources

Estimated Duration	■ 3–4 months to complete and evaluate pilot test

Risks/Success Factors	Prerequisite Activities
■ Civil Service rules prohibit desired changes ■ Customers resist losing their dedicated ICT staff	■ Pooling of application developers should occur as applications are rationalized ■ Project 18 — Improve Project Portfolio Management

Benefits	Costs
■ Improved resource allocation	■ Internal Costs: $264K–$352K ■ External Costs: N/A

Contingency Plan	Follow-Up Actions
■ Create informal Centers of Excellence (COEs) for common resources to promote knowledge sharing	■ Service Managers will review service management plans with General Managers, CTO and EA

Project	8. Enhance Responsibilites and Capabilities of ePMO	Program	B. Transition to Target State Organizational Structure

Objectives

- To enable the ePMO to lead the priortization of projects across the enterprise and to efficiently allocate State staff resources
- To ensure consistent application of project management processes across all projects

Addressed Recommendation Requirement(s)

- 4-4-3: DTMB must elevate the Enterprise Project Management Office (ePMO) by not having them report to a single IO
- 4-4-4: DTMB should centralize all project managers into the ePMO in order to drive consistent application of project management methodologies

Deliverables

- A RACI model that defines ePMO roles and responsibilities
- A revised organization chart that has the ePMO reporting to the Solutions Portfolio Manager

Scope	■ Enterprise project portfolio planning
Project Sponsor	■ CIO
Business Owner	■ ePMO Manager
Critical Team Members	■ Project Manager (quarter-time) ■ ePMO ■ Agency Services ■ Infrastructure Services ■ CTO and Enterprise Architecture ■ ICT Finance

High-Level Project Plan

1. Define the required processes for the ePMO
2. Define and document the RACI for the CTO and Enterprise Architecture organization
3. Move the ePMO under the Solutions Portfolio Manager
4. Consolidate existing project managers into the ePMO

Estimated Duration	■ 3–4 months to define the RACI model

Risks/Success Factors	Prerequisite Activities
■ Civil Service rules prohibit desired changes ■ Coordination between business units will be required	■ None

Benefits	Costs
■ Ability to coordinate all State ICT projects ■ Ability to efficiently allocate resources across ICT projects ■ Consistent application of project management methodologies	■ Internal Costs: $264K–$352K ■ External Costs: $150K–$200K

Contingency Plan	Follow-Up Actions
■ Have the ePMO report to the existing Agency Services lead	■ ePMO will update the Call for Projects process

Project	9. Establish CTO Organization	Program	B. Transition to Target State Organizational Structure

Objectives

- To clearly define the roles and responsibilities of the CTO
- To elevate the importance of enterprise architecture (EA)
- To formalize processes to transition innovative solutions into the enterprise service catalog

Addressed Recommendation Requirement(s)

- 2-4-1: DTMB must formally establish the role of a CTO who will be responsible for innovation and overseeing enterprise architecture
- 2-4-4: DTMB must define processes that coordinate the transition of innovative solutions into the enterprise service catalog

Deliverables

- A RACI model that defines CTO and EA roles and responsibilities
- A revised organization chart that has EA reporting to the CTO
- A Statewide Innovation Plan

Scope	■ Ownership of innovation and technology partnerships ■ Enterprise Architecture
Project Sponsor	■ CIO
Business Owner	■ CTO
Critical Team Members	■ Project Manager (quarter-time) ■ Agency Services: 2–4 (half-time) ■ Infrastructure Services ■ ePMO ■ Enterprise Architecture ■ Security ■ ICT Finance

High-Level Project Plan

1. Define the required processes for the CTO and Enterprise Architecture organization
   - Processes should include interactions with other organizations for solutions definition and for transition of innovative solutions into the enterprise service catalog
2. Define and document the RACI for the CTO and Enterprise Architecture organization
3. The CTO will develop a Statewide Innovation Plan

Estimated Duration	■ 3–4 months to define the RACI model

Risks/Success Factors	Prerequisite Activities
■ Civil Service rules prohibit desired changes ■ Coordination between business units will be required	■ Install a CTO

Benefits	Costs
■ Proactive development of innovative solutions that responds to business needs ■ Improved solution consistency across the enterprise	■ Internal Costs: $264K–$352K ■ External Costs: $150K–$200K

Contingency Plan	Follow-Up Actions
■ Establish OLAs within the current organizational structure	■ CTO will review Statewide Innovation Plan with the General Managers and the Service Managers

Project	10. Improve Capabilities to Retain and Attract Talented Resources	Program	B. Transition to Target State Organizational Structure

Objectives

- To identify resource and skills gaps to the Target Organizational Model and to close those gaps by:
  - Training existing staff resources
  - Attracting new staff resources
- To attract and retain staff by better defining the job titles and career paths for ICT resources

Addressed Recommendation Requirement(s)

- 4-3-1: DTMB must identify key resource gaps to achieve DTMB goals, and must develop internal training and sourcing allocation plan to address the gaps
- 4-3-2: DTMB must attract and retain talented staff
- 4-3-3: DTMB must rationalize job titles and responsibilities
- 4-3-4: DTMB must define career paths for technical resources

Deliverables

- Updated job titles and job descriptions for ICT
- Professional development training strategy
- Compensation study
- Succession planning strategy

Scope	■ DTMB ICT
Project Sponsor	■ CIO
Business Owner	■ CTO
Critical Team Members	■ Project Manager (quarter-time) ■ All DTMB ICT divisions ■ HR Director and civil service representatives

High-Level Project Plan

1. Define the job titles and job descriptions for ICT
2. Perform compensation study
3. Develop professional development training strategy
4. Develop succession planning strategy

Estimated Duration	■ 3–4 months

Benefits	Costs
■ Improved ICT staff capabilities	■ Internal Costs: $264K–$352K ■ External Costs: $250K–$300K

Risks/Success Factors	Prerequisite Activities
■ Civil Service rules prohibit desired changes ■ Anonymity of the skills inventory may prevent the development of individualized training plans	■ Projects 5, 6, 7 and 9 must be complete with RACI models finalized

Contingency Plan	Follow-Up Actions
■ Contract necessary resources	■ The State will fund and execute training and succession planning strategies

Program C: Improve Customer Alignment

Program Overview

Program C: Improve Customer Alignment

Program Overview

- Program C is focused on improving existing customer relationships, exploring potential partnerships and addressing immediate business needs.
- The completion of Program C will improve DTMB's relationship with its IT customers and will identify partnerships that may yield additonal economies of scale. The projects that comprise Program C are as follows:
  - C-11: Enhance Current Relationships
  - C-12: Explore New Customer Partnerships
  - C-13: Address Unfulfilled Customer Requirements.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

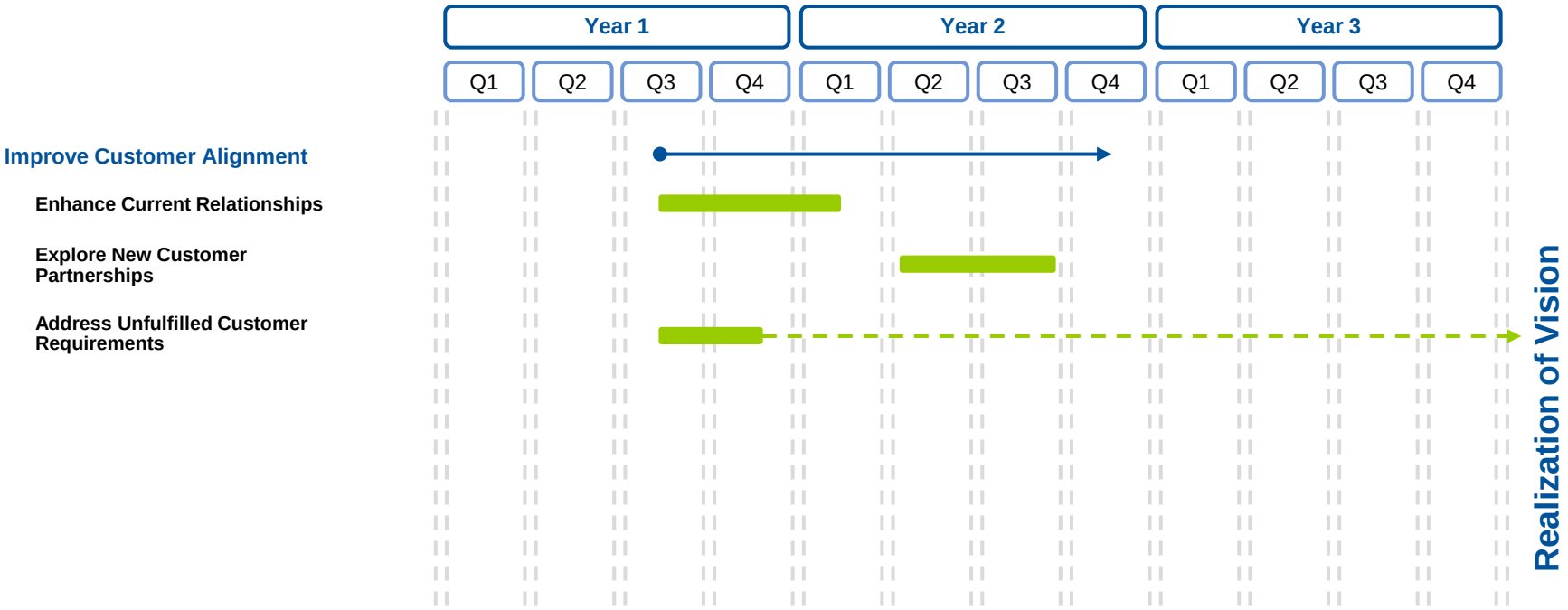
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $400K–$500K (est.) Internal Costs: $704K–$968K (est.) Potential Future Costs: ■ Mobility solution implementation ■ BI solution implementation ■ Customer self-service implementation	■ Increased customer satisfaction ■ Perception of DTMB as as strategic partner to the customer ■ Economies of scale for IT procurements ■ New services that address stated business needs by customers	■ IT strategic plans for all customers ■ Documented customer satisfaction measurement process ■ A formal DTMB Service and Solution Marketing Strategy ■ Signed partnership agreements with new partners ■ Service offerings in the service catalog for mobile and BI solutions ■ An assessment of the business need and requirements for a customer self-service offering by the State

Program C: Improve Customer Alignment

Program Road Map

Program……
Project ……
Follow-On Tasks…

- Although improving customer relationships is a high priority for DTMB, the focus should be on establishing a customer service organization that will address the needs of the business. Once this foundation is established, DTMB should focus on Program C, which will build on the revised customer service organization and establish DTMB as a strategic partner to new and existing customers.



Program C: Improve Customer Alignment

- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - IT Business Effectiveness (ITBE) Survey
  - Project Charters

Program C: Improve Customer Alignment

ITBE Survey

Program C: Improve Customer Alignment

ITBE Survey: Business Expecations of IT Drives Changes to IT Delivery Model and the Organizational Architecture

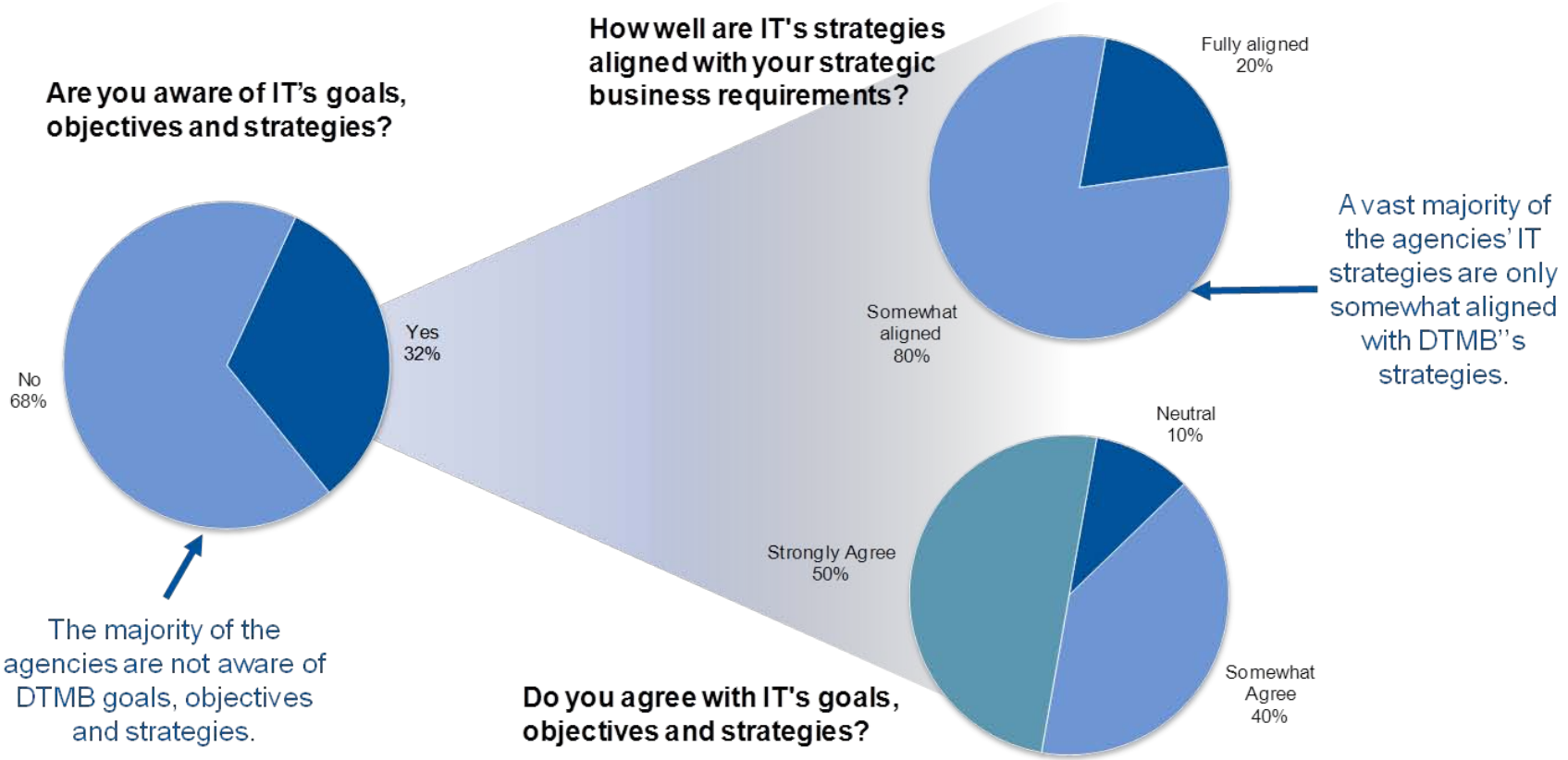
Current State = ○
Target State = ▲

- The IT Business Effectiveness Survey revealed that 90% of DTMB customers expect ICT to enhance or transform their business.

Program C: Improve Customer Alignment

ITBE Survey: IT Goals, Objectives and Strategies

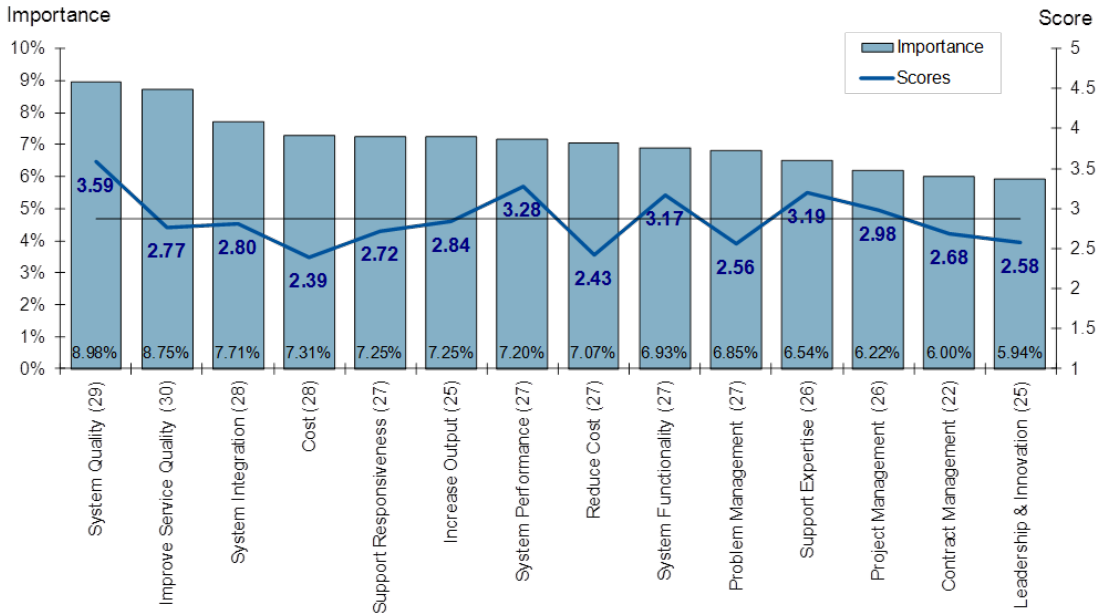
- Despite these expectations, only 32% of the respondents were aware of IT's goals, objectives and strategies and, of that 32%, only 20% felt that IT strategies fully aligned with their strategic business requirements.



Program C: Improve Customer Alignment

ITBE Survey: Overall Scores and Importance

- The following graphic shows several elements of the ITBE survey results:
  - The blue columns show the relative importance of the services and systems criteria for all responding agencies
  - The blue line indicates the satisfaction scores for each of the services and systems criteria
  - The straight black line is the average satisfaction score for DTMB — 2.87



DTMB should address the services and systems that are most important and have the lowest satisfaction scores.

Program C: Improve Customer Alignment

Project Charters

Project	11. Enhance Current Client Relationships	Program	C. Improve Customer Alignment

Objectives

- To position General Managers as the strategic partners of DTMB customers
- To develop IT strategic plans for customers that align with IT direction of the State
- To measure customer satisfaction and maintain high satisfaction levels

Addressed Recommendation Requirement(s)

- 1-1-1: DTMB must establish itself as a strategic partner to its customers, and must work with its customers to define IT strategies that meet business needs and align with the overall IT direction of the State
- 1-1-4: DTMB must proactively measure customer satisfaction on a periodic basis (e.g., monthly or quarterly)
- 1-1-5: DTMB must take action on customer feedback so that customer satisfaction responses improve or remain high

Deliverables

- IT strategic plans for all customers
- Documented customer satisfaction measurement process

Scope	■ The existing Agency Services organization
Project Sponsor	■ Agency Services Director
Business Owner	■ Agency Services Director
Critical Team Members	■ Project Manager (quarter-time) ■ Agency Services: 2–4 (half-time)

High-Level Project Plan

1. General Managers will meet with agencies to develop IT strategic plans and necessary funding for desired projects
2. General Managers will submit requested projects and current projects into the enterprise project management portfolio
3. Agency Services will develop and document a customer satisfaction measurement process

Estimated Duration	■ 3–4 months to develop strategic plans

Risks/Success Factors

- Customers may not allow General Managers to interact with executive staff

Prerequisite Activities

- Project 5 — Redefine Customer Relationship Model
- Project 17 — Instititute IT Investment Management
- Project 18 — Improve Project Portfolio Management

Benefits

- Increased customer satisfaction
- Perception of DTMB as as strategic partner to the customer

Costs

- Internal Costs: $264K–$352K
- External Costs: N/A

Contingency Plan

- Project funding request must be approved by customer executives

Follow-Up Actions

- General Managers will periodically measure customer satisfaction

Project	12. Explore New Customer Partnerships	Program	C. Improve Customer Alignment

Objectives

- To develop a strategy and processes for marketing services and solutions to potential partners
- To develop partnerships where local governments and State, federal and commercial organizations use DTMB services because services are high-quality and price-competitive

Addressed Recommendation Requirement(s)

- 1-2-1: DTMB must define a formal strategy for marketing its services and solutions to potential partners, and must align with the overall IT direction of the State
- 1-2-2: DTMB must explore the possibilities of sharing services with local governments as well as State, federal and commercial organizations
- 1-2-3: DTMB must conduct a market pricing analysis to determine if it will be price-competitive

Deliverables

- A formal DTMB Service and Solution Marketing Strategy
- A market assessment of potential DTMB partners that documents potential partner business needs and a market pricing analysis for possible shared solutions
- Signed partnership agreements with new partners

Scope	■ The existing Agency Services organization
Project Sponsor	■ Agency Services Director
Business Owner	■ Agency Services Director
Critical Team Members	■ Project Manager (quarter-time) ■ Agency Services: 2–4 (half-time)

High-Level Project Plan

1. Develop a strategy and processes for marketing services and solutions to potential partners
2. Understand the service needs and partnership opportunities with local governments, as well as State, federal and commercial organizations
3. Understand if DTMB will be market-competitive for services needed by potential partners
4. Negotiate and sign partnership agreeements with new customers

Estimated Duration	■ 2–3 months for market analysis

Risks/Success Factors

- DTMB must dedicate staff to be General Managers and Business Analysts to new partners
- Potential customer must be involved in the requirements definition and solution design process for new services

Prerequisite Activities

- Project 5 — Redefine Customer Relationship Model
- Project 20 — Define Enterprise Service Catalog
- Project 21 — Define and Implement Sourcing Strategy

Benefits

- Market analysis will inform sourcing decisions
- Economies of scale for IT procurements

Costs

- Internal Costs: $264K–$352K
- External Costs: $250K–$300K

Contingency Plan

- DTMB will opportunitistically partner with new customers

Follow-Up Actions

- General Managers will periodically measure customer satisfaction

Project	13. Address Unfulfilled Customer Requirements	Program	C. Improve Customer Alignment

Objectives

- To develop a strategy and processes for marketing services and solutions to potential partners
- To develop partnerships where local governments and State, federal and commercial organizations use DTMB services because services are high-quality and price-competitive

Addressed Recommendation Requirement(s)

- 2-3-1: DTMB must work with its customers to define mobile solution requirements and to develop a mobilie solution service offering to include in the enterprise service catalog
- 2-3-2: DTMB must work with its customers to define BI requirements and to develop a BI solution service offering to include in the enterprise service catalog
- 2-3-3: DTMB must work with its customers to assess the business need and requirements for customer self-service offerings

Deliverables

- Service offerings in the service catalog for mobile and BI solutions
- An assessment of the business need and requirements for a customer self-service offering by the State

Scope	■ Solutions Portfolio Manager
Project Sponsor	■ Solutions Portfolio Manager
Business Owner	■ Solutions Portfolio Manager
Critical Team Members	■ Project Manager (quarter-time) ■ Solutions Portfolio Manager ■ Agency Services: 2–4 (half-time) ■ CTO and Enterprise Architect ■ Security ■ Procurement ■ ICT Finance

High-Level Project Plan

1. Assess the business need and requirements for a customer self-service offering by the State
2. Understand the mobility and BI requirements for existing and potential customers
3. Work with CTO, EA and Security to design appropriate solutions
4. Make sourcing decision on solution
5. Develop or acquire the solution and add to the enterprise service catalog
6. Assign service manager(s)

Estimated Duration	■ 2–3 months to understand the need for a customer-self service offering

Risks/Success Factors

- Potential customers must be involved in the requirements definition and solution design process for new services

Prerequisite Activities

- Project 5 — Redefine Customer Relationship Model
- Project 6 — Establish Service Management Model
- Project 9 — Establish CTO Organization

Benefits

- New services that address stated business needs by customers
- Solutions designed to be used by more than one customer

Costs

- Internal Costs: $264K–$352K
- External Costs: $150K–$200K

Contingency Plan

- Agency Services will develop solutions for their customers

Follow-Up Actions

- General Managers will periodically measure customer satisfaction

Program D: Improve Procurement

Program Overview

Program D: Improve Procurement

Program Overview

- Program D is aimed to fundamentally improve the composition and operation of the procurement, contract management and vendor management functions within DTMB.
- Execution of Program D will introduce added standardization and efficiency into core procurement processes; create standard manuals, templates and training for State employees; and ensure that the State is getting the best value for its IT contracts and investments.
- The projects that comprise Program D are as follows:
  - D-14: Implement Procurement Fundamentals
  - D-15: Develop Vendor Management Discipline
  - D-16: Prepare and Plan for the Procurement of an eProcurement System.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

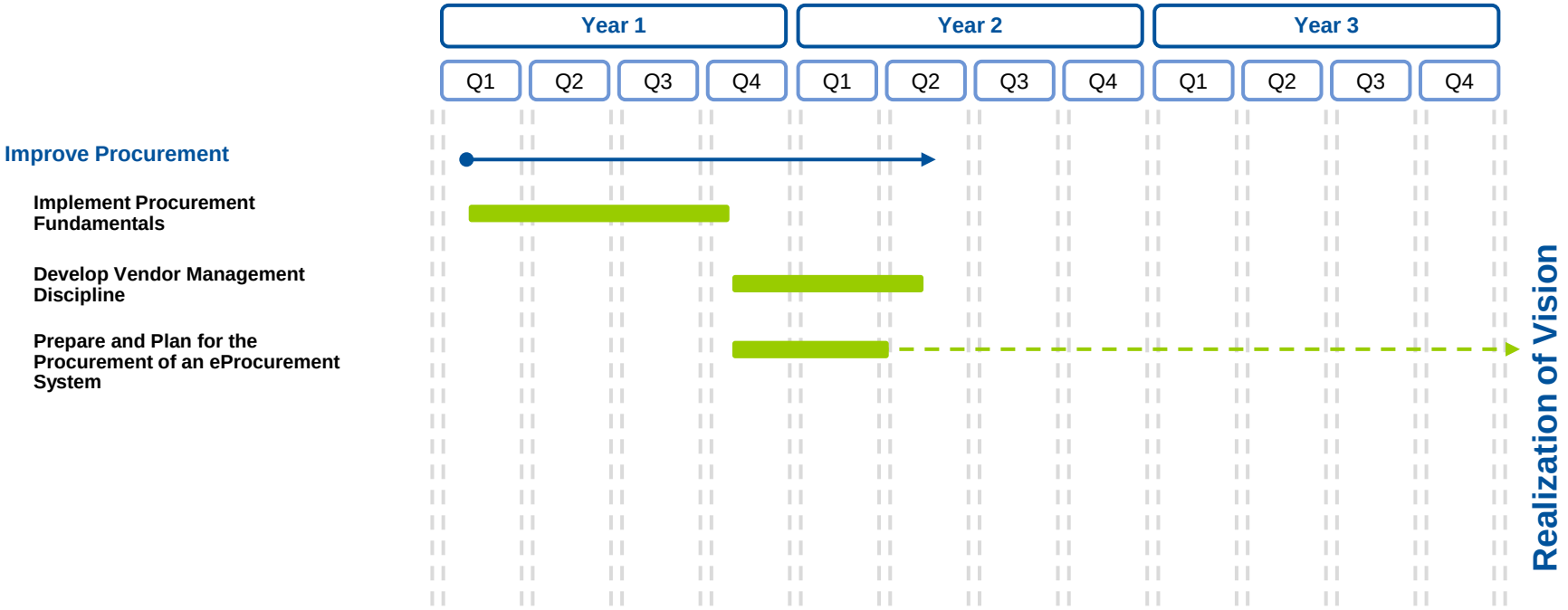
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $925K–$1.6M (est.) Internal Costs: $1.1M–$1.8M (est.) Potential Future Costs: ■ eProcurement software and implementation ■ Software licensing tracking solution and exploration of other automation opportunities	■ Standardized and automated processes and increased efficiency ■ Improved contracts, terms and conditions ■ Vendor oversight to reduce contract risk and maximize value ■ Aggregated, centralized view of contracts and renegotiation targets ■ Enforcement of procurement policies and rules ■ Spend analysis capacity ■ Baseline reporting and dashboards	■ Documented Procurement Future Operating Model and Re-engineered Business Processes ■ Procurement Manual(s) and Standardized Templates ■ Vendor Management Charter, Org. Model and Staffing Plan ■ Contract Management Tracking Tool/Contract Portfolio Scorecard ■ Renegotiation Target Matrix ■ eProcurement Business Case, Procurement and Implementation

Program D: Improve Procurement

Program Road Map

Program……
Project ……
Follow-On Tasks…

- Program D should begin immediately to address critical procurement needs, and to support sourcing activities emanating from other programs. The eProcurement project duration and budget must be estimated through development of a business case — hence, the follow-on implementation tasks illustrated below.



Program D: Improve Procurement

- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - Procurement Function Peer Comparisons
  - Project Charters

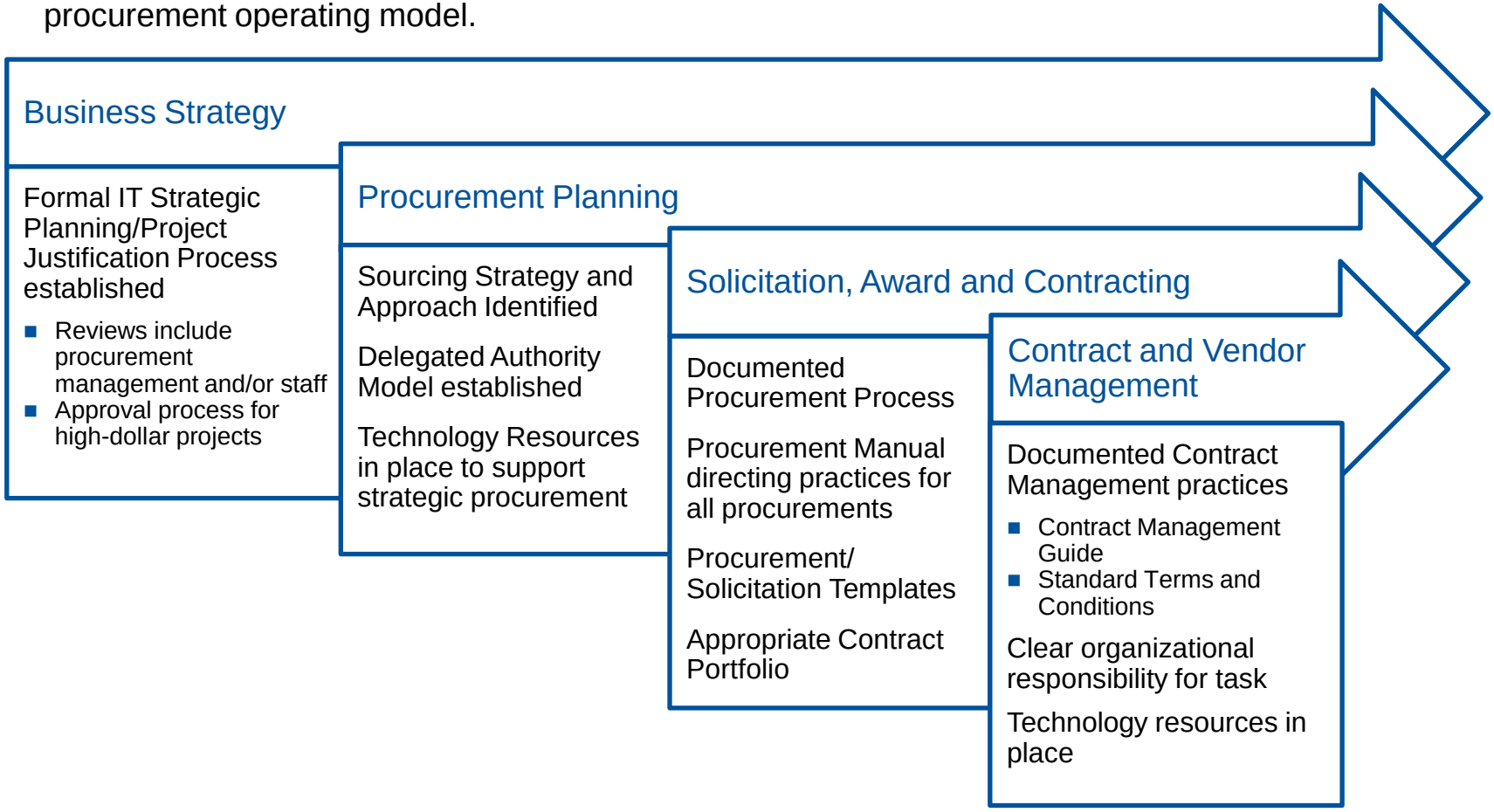
Program D: Improve Procurement

Procurement Function Peer Comparisons

Program D: Improve Procurement

Procurement Function Peer Comparisons: Defining the Procurement Role

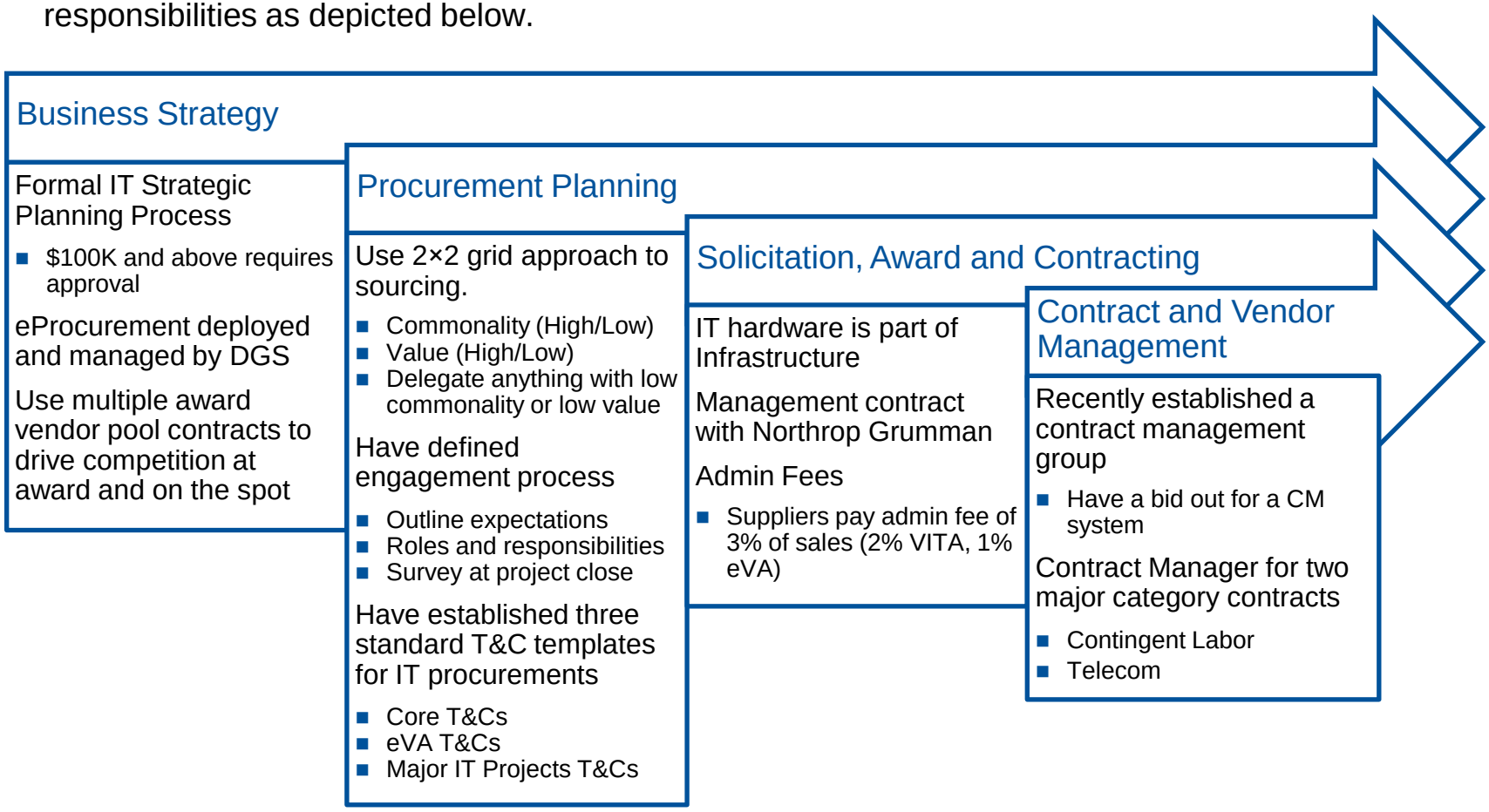
- Critical to the changes for the State procurement function is the definition of roles and responsibilities. Gartner designates four primary roles that must be clearly defined for the new procurement operating model.



Program D: Improve Procurement

Procurement Function Peer Comparisons: Virginia Procurement Overview

- The State of Michigan can benefit from best practices implemented in other states when defining and filling roles. One peer, the State of Virginia procurement approach, defined its roles and responsibilities as depicted below.



Program D: Improve Procurement

Procurement Function Peer Comparisons: Arizona Procurement Overview

- The State of Arizona procurement approach is illustrated below. A key element that the State of Michigan should aim to adopt is the regimented project justification process under Business Strategy.

Business Strategy

Project Justification Process Used

- Review and Approval of Project Justifications includes Procurement
- Greater than $1M requires review by IT Review Board for approval

Procurement Planning

Sourcing Criteria

- Spend
- Number of Entities Impacted
- Type of Contract
- Level of Risk

eProcurement system allows for demand aggregation

- Able to survey State agencies and Coop Members to determine demand prior to solicitation

Solicitation, Award and Contracting

Delegation Authority

- Small agencies — <$100K
- Large agencies — Unlimited

Admin Fees

- No fees charged to State agencies
- Supplier remits 1% of sales for Coop Members

Utilizes WSCA contracts for Software and Commodity Hardware, with the exception of Network Equipment and Services

Contract and Vendor Management

Large Agency/Program-Specific Contracts

- Programs Handle
- Purchasing assigns a contract officer to handle contractual issues

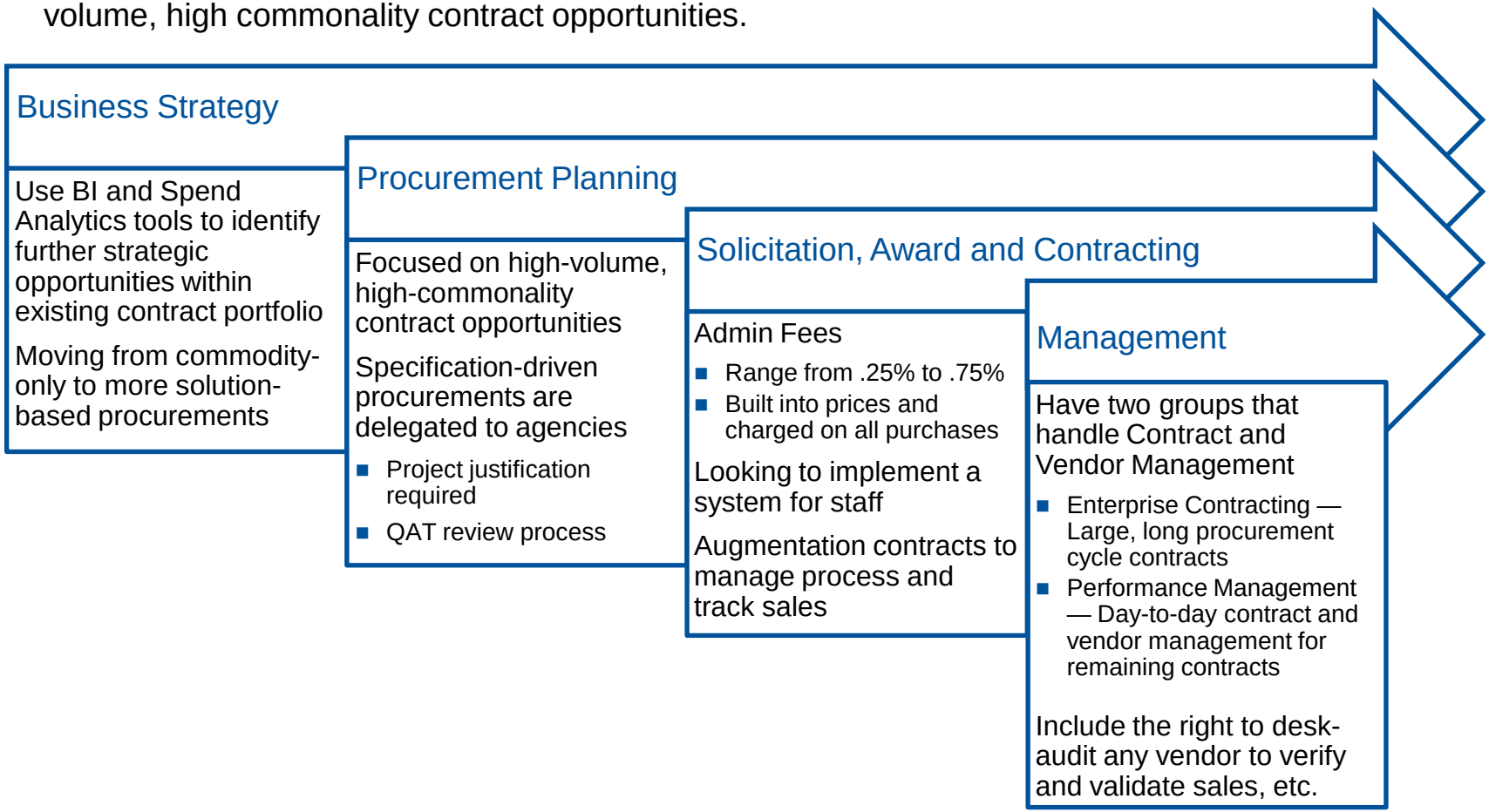
Statewide Contracts

- Vendor deficiency report tool provided on website
- Reports from customers are forwarded to Contracting Officer
- Contracting Officer contacts vendor to address accordingly

Program D: Improve Procurement

Procurement Function Peer Comparisons: Texas Procurement Overview

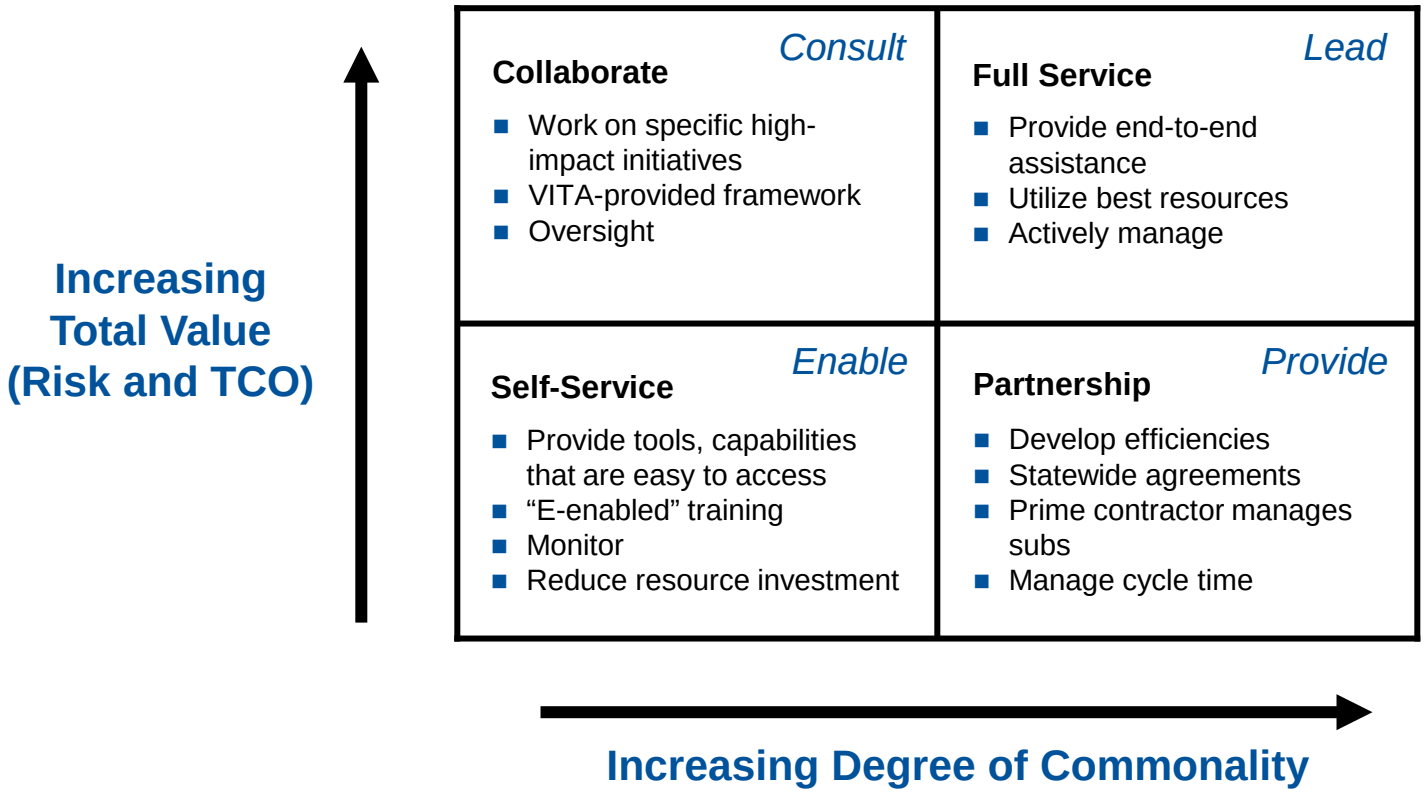
- The State of Texas procurement approach is illustrated below. Of particular interest for the State of Michigan future model is business intelligence and spend analysis tools and a focus on high volume, high commonality contract opportunities.



Program D: Improve Procurement

Procurement Function Peer Comparisons: Virginia Supply Chain Management Segmentation Model

- The State can also benefit from a defined model for determining the level of involvement in procurement activities. The State of Virginia used the model below to “right size” its involvement to ensure a balance between procurement resource constraints and client autonomy.



Program D: Improve Procurement

Procurement Function Peer Comparisons: Commodity Contracting and Administration Fees Comparison

- Finally, the State should investigate opportunities related to administrative fees and commodity contracting. As demonstrated below, peer states have negotiated very favorable terms, and some have used administrative fees to fund eProcurement operations.
  - Michigan
    - No set admin fee structure; ranges from nothing on some contracts to 2%–8% on the MMCC contract
    - Admin fee is charged to all users, including State agencies
    - Admin fee is built directly into the pricing — not determined on contract sales
  - Virginia
    - Suppliers remit 3% of all contract sales, regardless of buyer
      - 2% to VITA
      - 1% to DGS for eVA
  - Arizona
    - Does not charge any admin fees to State agencies
    - Supplier remits 1% of all contract sales for Coop contracts
      - Based on Coop Member spend only
  - Texas
    - Statutorily limited to maximum of 2%
    - Individual contracts range from .25% to .75%

Program D: Improve Procurement

Project Charters

Project	14. Implement Procurement Fundamentals	Program	D. Improve Procurement

Objectives

- Align procurement function with best practices and adapt processes and procedures
- Create a future operating model for Procurement and standardize all procurement processes
- Identify procurement documents that can be standardized to improve efficiency and effectiveness of the procurement process
- Delegate agency-specific, requirements-driven procurements to agency purchasing staff and/or I/Os to allow DTMB procurement staff to focus on more-strategic procurement efforts

Addressed Recommendation Requirement(s)

- 3-2-1: DTMB must establish and formally document procurement and contract management processes
- 3-2-1: DTMB must resource critical procurement organizational functions
- 3-2-4: DTMB must research and establish a future state revenue model to assist in supporting the procurement functions, including both appropriate staffing and deployment of the eProcurement system
- 3-2-5: DTMB must re-evaluate current procurement vehicles to develop a priority matrix to drive renegotiation of pricing and terms where appropriate

Deliverables

- Documented Procurement Future Operating Model
- Documentation for Re-engineered Business Processes
- Procurement Manual(s)
- Standardized Procurement Templates
- Procurement Training Charter and Plan
- Documented and Approved Delegated Authority Parameters

Scope	■ Procurement Function
Project Sponsor	■ CPO
Business Owner	■ CPO
Critical Team Members	■ Project Manager (quarter-time) ■ Procurement/Purchasing: 2–3 (half-time) ■ ePMO ■ Budget Director ■ ICT Finance

High-Level Project Plan

1. Secure External Needs/Conduct Solicitation(s)
2. Define Roles and Responsibilities for the Project
3. Define Future Model and Business Processes
4. Develop Procurement Manual and Standard Templates
5. Define Training Plan
6. Communicate Templates and Training Program to State Stakeholders

Estimated Duration	■ 6–12 months

Risks/Success Factors	Prerequisite Activities
■ Securing external assistance ■ Lack of specified job role or organizational unit responsible for this activity will greatly limit the effectiveness of the project ■ Marketing and usage of manuals, templates and training	■ None

Benefits	Costs
■ Standardized processes and increased efficiency ■ Improved contracts, terms and conditions	■ Internal Costs: $264K–$528K ■ External Costs: $350K–$600K

Contingency Plan	Follow-Up Actions
■ Continue to operate understaffed and implement incremental improvements where possible	■ Monitor usage and efficacy of templates ■ Measure efficiency improvements

Project	15. Develop Vendor Management Discipline	Program	D. Improve Procurement

Objectives

- Establish vendor management function and grow project oversight capabilities to reduce risk and costs
- Develop standard contract management tools and processes
- Identify and assign Legal Counsel for vendor management support

Addressed Recommendation Requirement(s)

- 3-2-1: DTMB must establish and formally document procurement and contract management processes
- 3-2-1: DTMB must resource critical procurement organizational functions

Deliverables

- Vendor Management Charter, Organizational Model and Staffing Plan
- Contract Management Tracking Tool
- Contract Portfolio Scorecard
- Renegotiation Target Matrix
- Assigned Contract Legal Counsel

Scope	■ Procurement Function
Project Sponsor	■ CPO
Business Owner	■ CPO
Critical Team Members	■ Project Manager (quarter-time) ■ DTMB Procurement 2–3 (half-time) ■ ePMO ■ Legal

High-Level Project Plan

1. Research current models and best practices for contract management
2. Research peer organizations' processes and procedures
3. Document existing processes and practices for contract management
4. Determine model to be implemented
5. Develop contract/negotiation tools
6. Identify Legal Counsel support
7. Source organizational gaps

Estimated Duration	■ 3–5 months

Risks/Success Factors	Prerequisite Activities
■ Securing external assistance for project ■ Staffing vendor management function to adequate level	■ None

Benefits	Costs
■ Vendor oversight to reduce contract risk and maximize value ■ Aggregate, centralized view of contracts and renegotiation targets	■ Internal Costs: $264K–$440K ■ External Costs: $275K–$500K

Contingency Plan	Follow-Up Actions
■ Leverage ePMO for PPM oversight and integrate with contract/deliverable tracking to the extent possible	■ Staff vendor management function and integrate processes with project and portfolio management

Project	16. Prepare and Plan for the Procurement of an eProcurement System	Program	D. Improve Procurement

Objectives

- Perform preparatory work; procure and implement an automated eProcurement system that meets the State's minimum requirements
- Research and establish a future state revenue model to assist in supporting the procurement functions, including both appropriate staffing and deployment of the eProcurement system

Addressed Recommendation Requirement(s)

- 3-2-3: DTMB must automate the procurement process through the deployment of an eProcurement System

Deliverables

- eProcurement Business Case
- Documented Revenue Strategy/Funding Model
- System requirements/SOW/solicitation document

Scope	■ Michigan State and Local Procurement Functions
Project Sponsor	■ CPO
Business Owner	■ CPO
Critical Team Members	■ Project Manager (quarter-time) ■ DTMB Procurement 2–3 (half-time) ■ Agency/Infrastructure Services/EA 1–2 (quarter-time) ■ Local Governments ■ ePMO ■ ICT Finance

High-Level Project Plan

- Establish a Procurement Model for sourcing activity
- Review and analyze best practices and peer state sourcing/deployments
- Gather requirements for system
- Identify evaluation criteria
- Identify key performance indicators
- Develop solicitation document

Estimated Duration

- 9–15 months

Risks/Success Factors

- Funding for one-time and ongoing costs
- Organizational and process changes aligned with best practices for best implementation result

Prerequisite Activities

- Project 14 — Implement Procurement Fundamentals

Benefits

- Streamlined and automated procurement processes
- Enforces procurement policies and rules
- Provides spend analysis capacity and baseline reporting and dashboards

Costs

- Internal Costs: $528K–$792K
- External Costs: $300K–$500K for procurement assistance; eProcurement system TBD

Contingency Plan

- Clearly document procurement processes as they relate to existing system
- Update/upgrade existing systems to automate current processes

Follow-Up Actions

- Implement a software licensing tracking solution, and explore other automation opportunities
- Contract management/PPM oversight

Program E: Facilitate Project Prioritization and Portfolio Management

Program Overview

Program E: Facilitate Project Prioritization and Portfolio Management

Program Overview

- Program E is focused on establishing processes to budget, coordinate and manage ICT projects within the State.
- The completion of Program E will allow DTMB to improve the monitoring and management of large ICT investments. The projects that comprise Program E are as follows:
  - E-17: Institute ICT Investment Management
  - E-18: Improve Project Portfolio Management
  - E-19: Enhance Project Management.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

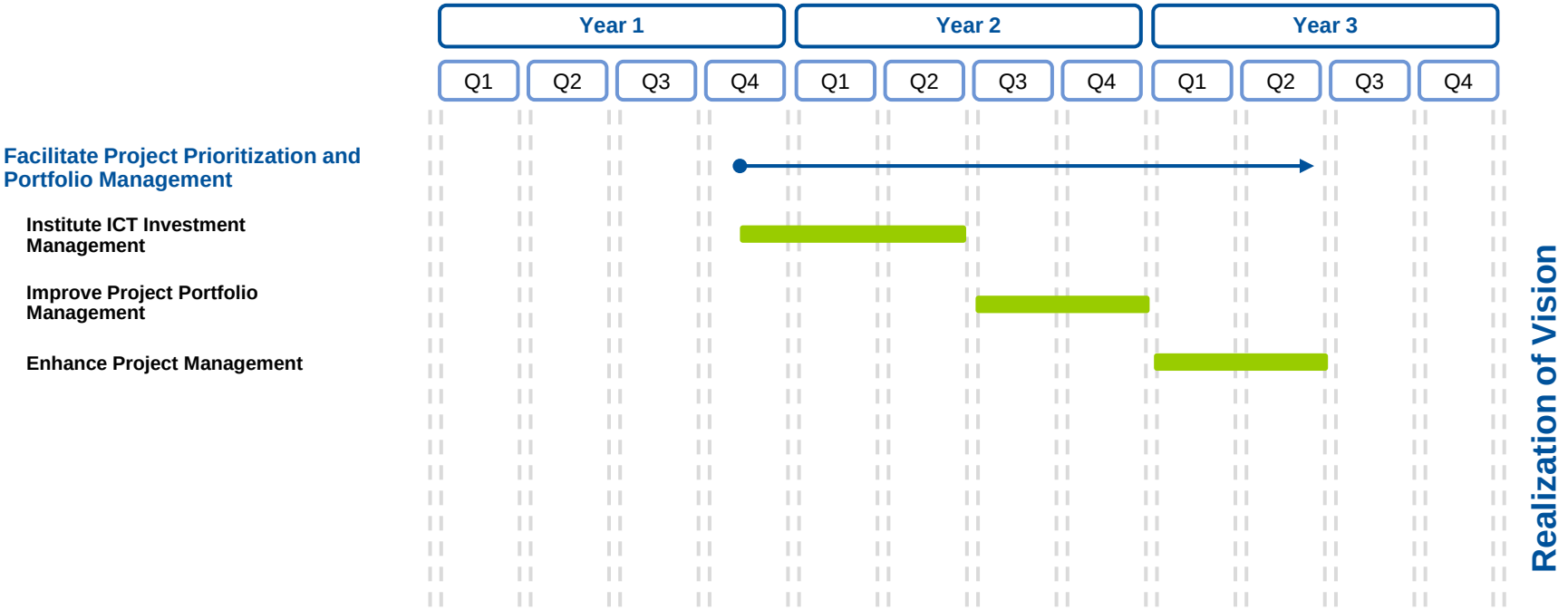
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $500K–$700K (est.) Internal Costs: $792K–$1.144M (est.) Potential Future Costs: ■ N/A	■ The State will focus on the business benefits from ICT investments ■ The State will better leverage existing resources to accommodate project demands	■ RACI models ■ Defined templates for ICT project funding requests ■ ICT Project Portfolio for projects in progress and on hold ■ Documented process for handling customer change requests to project scope, schedule or budget

Program E: Facilitate Project Prioritization and Portfolio Management

Program Road Map

Program……
Project ……
Follow-On Tasks…

- Although improving the management of ICT investments and projects is very important to DTMB, the focus should be on empowering the ePMO to manage the enterprise project portfolio. Once this foundation is established, DTMB should focus on Program E, which will allow the State to appropriately budget ICT investments and to allocate ICT resources.



Program E: Facilitate Project Prioritization and Portfolio Management

- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - Business-Driven Governance
  - Project Charters.

Program E: Facilitate Project Prioritization and Portfolio Management

Business-Driven Governance

Program E: Facilitate Project Prioritization and Portfolio Management

Business-Driven Governance: Overview

- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - Governance
  - Portfolio, Program and Project Management
  - Project Charters.

Program E: Facilitate Project Prioritization and Portfolio Management

Governance

Program E: Facilitate Project Prioritization and Portfolio Management

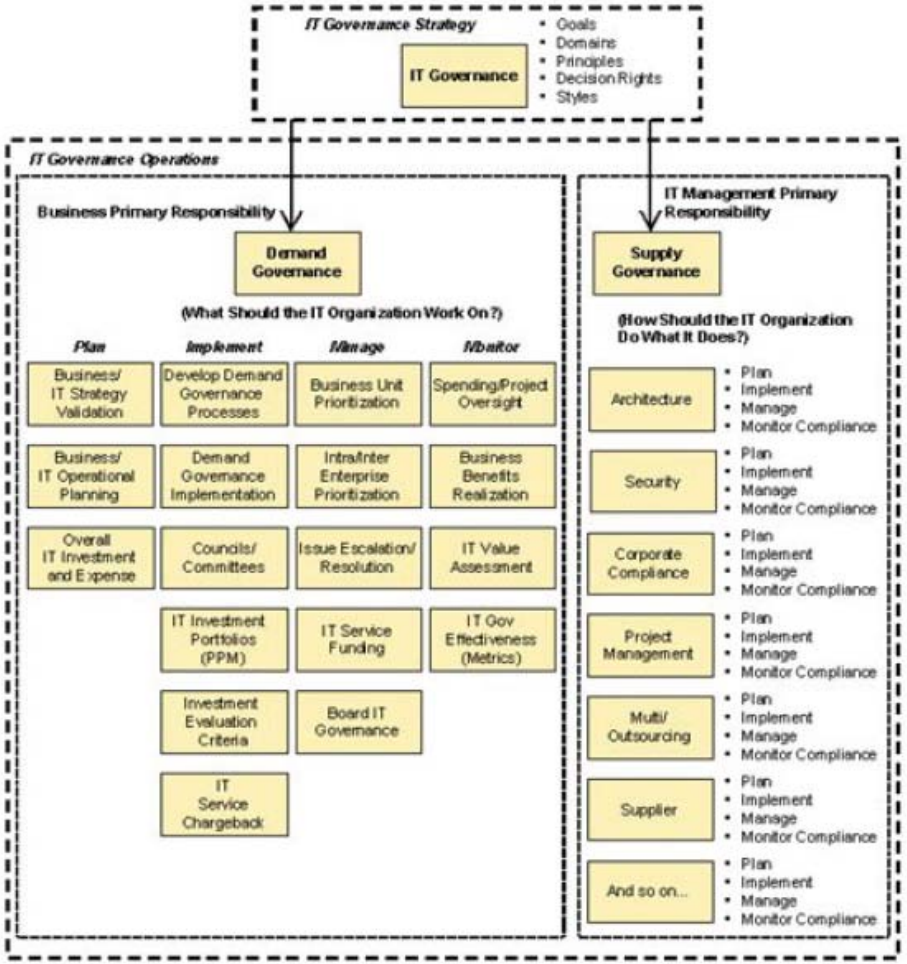
Governance: Overview

- As the DTMB works with all agencies to determine and manage IT investments and the allocation of resources to complete projects, establishing a governance framework will significantly grow in importance.
- Gartner defines IT governance as: “The processes that ensure the effective and efficient use of IT in enabling an organization to achieve its goals.” This definition contains certain key concepts:
  - IT governance specifies decision rights and creates an accountability framework that encourages desirable behavior in the use of IT
  - IT governance is composed of processes with the inputs, outputs, roles and responsibilities that are inherent in a process definition (however, the definition does not talk about how these processes might be implemented)
  - Governance ensures consistent decision making as opposed to executing specific decisions
  - The purpose of governance is to achieve a *business goal* (e.g., globalizing the business), not to simply approve a project portfolio
  - Governance strives to increase *business value*, supported with clear measures of improved effectiveness and efficiency

Program E: Facilitate Project Prioritization and Portfolio Management

Governance: Gartner IT Governance Demand/Supply Model

- As the State matures its IT governance, it should apply a framework similar to the Gartner IT Governance Demand/Supply Model
- The Gartner IT Governance Demand/Supply Model was devised to divide IT governance into its two major components:
  - IT governance strategy (demand governance)
  - IT governance operations (supply governance).

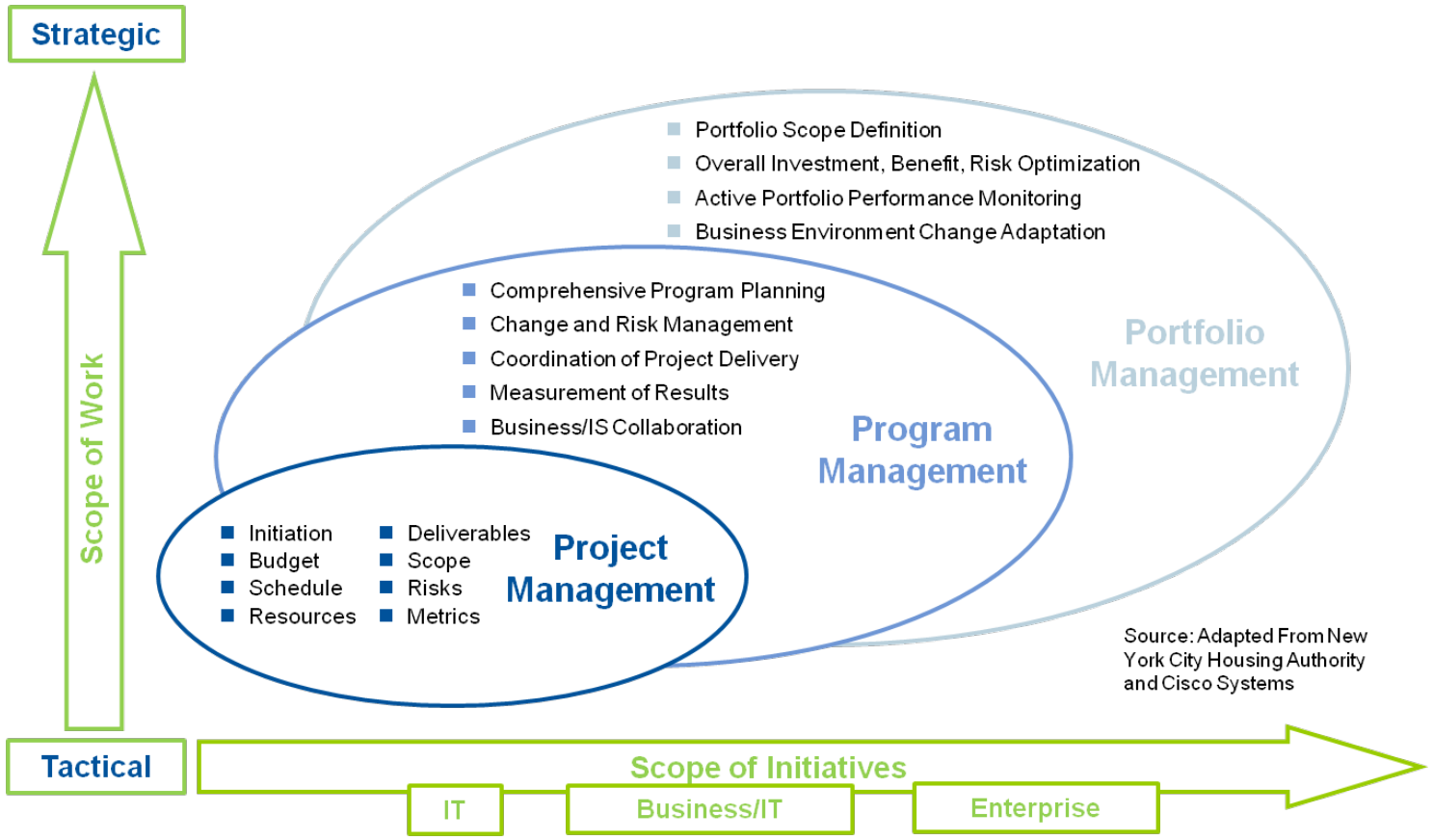


Program E: Facilitate Project Prioritization and Portfolio Management

Portfolio, Program and Project Management

Program E: Facilitate Project Prioritization and Portfolio Management

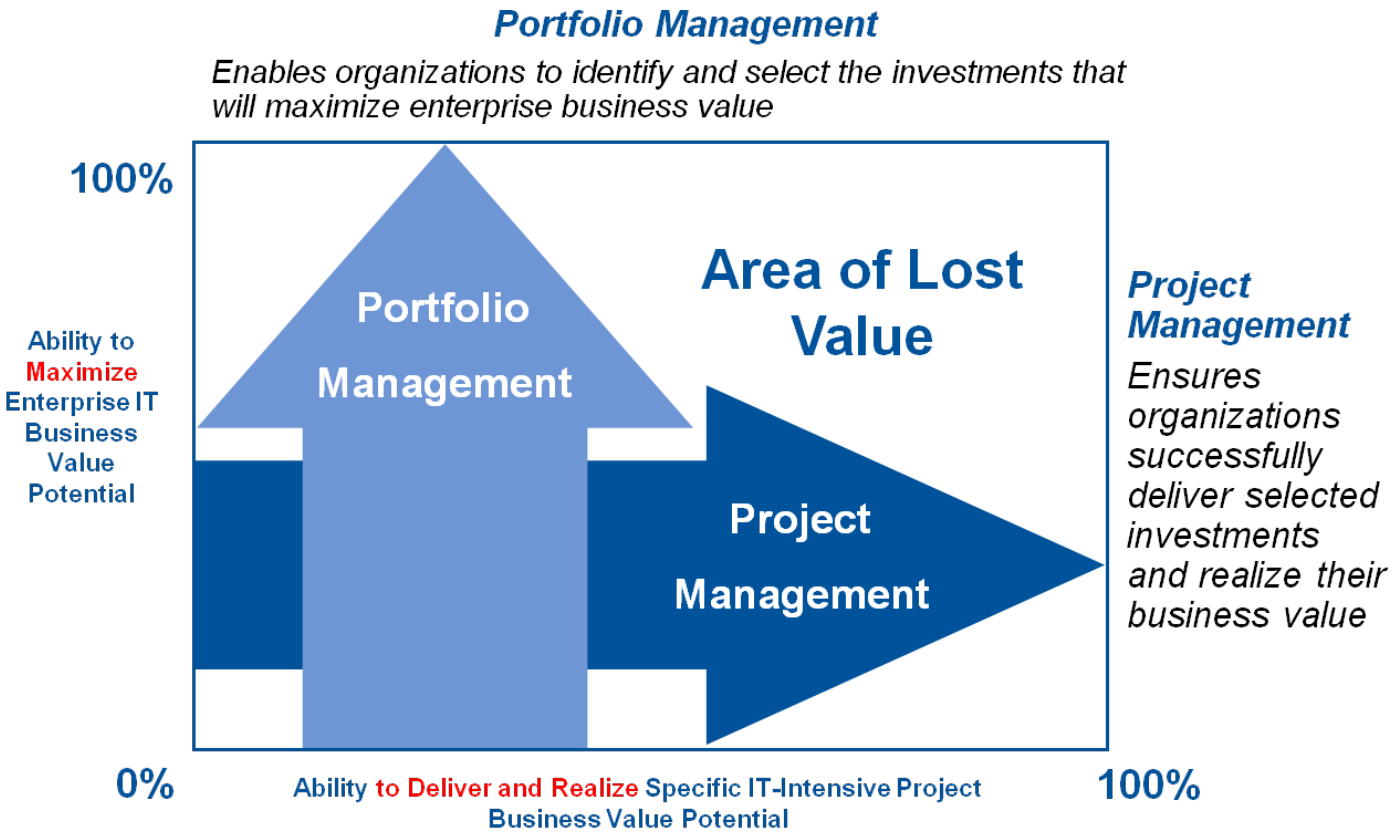
Portfolio, Program and Project Management: Expand Project Management Focus



While DTMB is currently focused on project management, strategically the focus should expand to include program and portfolio management.

Program E: Facilitate Project Prioritization and Portfolio Management

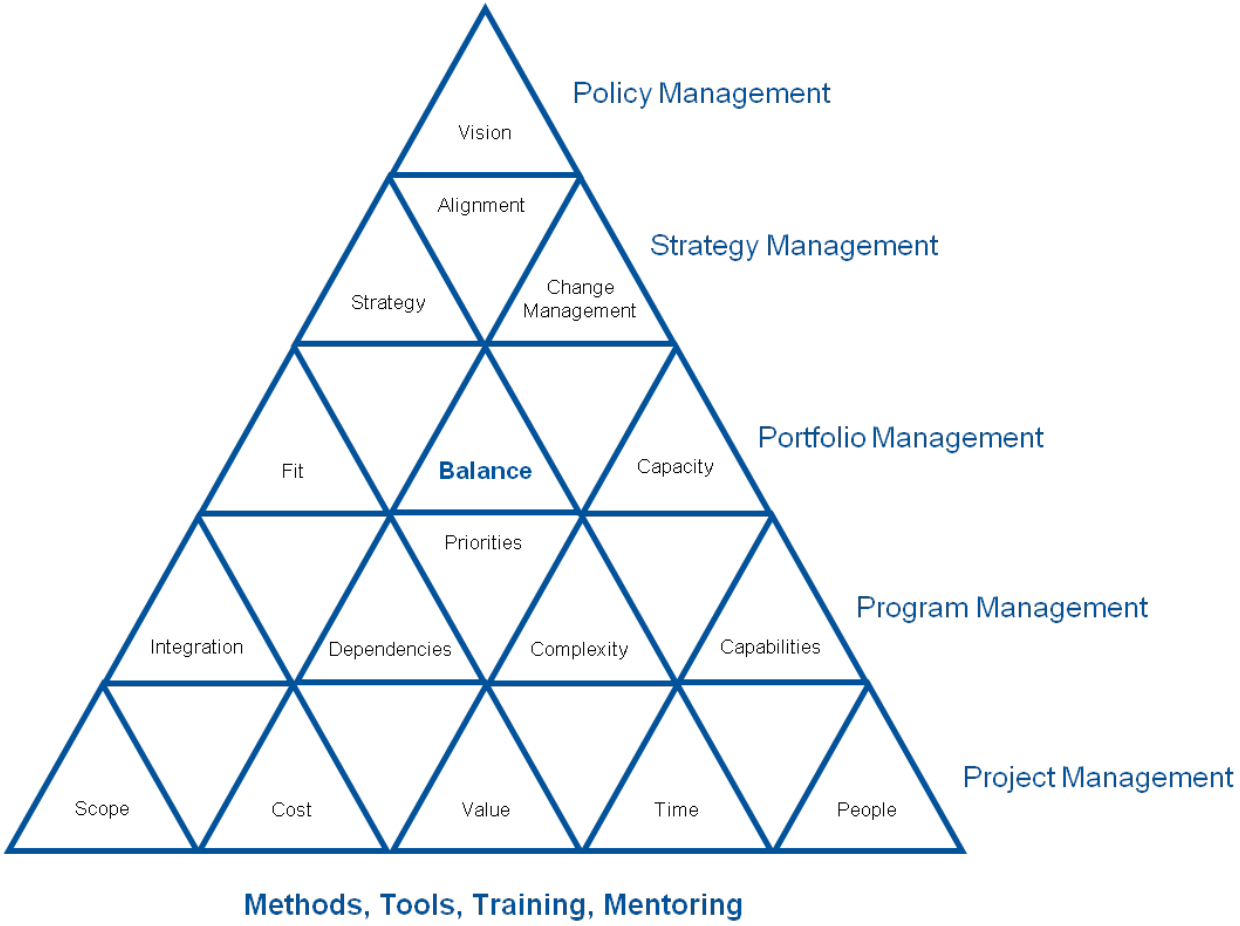
Portfolio, Program and Project Management: Project Management vs. Portfolio Management



To deliver on DTMB's strategic vision, both Project and Portfolio management need to be a focus for the State of Michigan.

Program E: Facilitate Project Prioritization and Portfolio Management

Portfolio, Program and Project Management: Where the PMO Fits



The right PMO structure will help DTMB stay in balance and realize its strategic vision.

Program E: Facilitate Project Prioritization and Portfolio Management

Portfolio, Program and Project Management: Post-implementation Benefits Realization Reviews

- Gartner has a framework for post-implementation benefits realization reviews. These reviews would ensure that project and portfolio management within DTMB align with the DTMB and State agency strategies. Gartner Research recommends a five-step process cycle for ensuring that projects and programs achieve their stated business benefits — as well as the enabling technical benefits.

Program E: Facilitate Project Prioritization and Portfolio Management

Project Charters

Project	17. Institute ICT Investment Management	Program	E. Facilitate Project Prioritization and Portfolio Management

Objectives

- To establish a process for reviewing and approving funding requests for new and ongoing ICT projects
  - Customers must identify the business benefits for the ICT investment and a business owner accountable for the benefits
  - DTMB must lead the development of ICT project cost estimates
  - Review processes must accommodate legislative mandates, federal funding implications and potential business benefits
- To have ICT projects become individual line-items in the DTMB budget

Addressed Recommendation Requirement(s)

- 1-3-1: DTMB must establish a governance model and processes that allow customers to voice the importance of their projects and initiatives during the project funding and prioritization processes
- 4-1-1: DTMB must define specific budgets for each ICT investment
- 4-1-2: DTMB must promote an expectation that projects will be managed against defined budgets and that additions to scope or schedule will impact the cost for the delivery of the project
- 4-1-4: DTMB must facilitate the ROI/Benefits Realization Process so that each customer acknowledges the projected benefits and costs for each of its initiatives

Deliverables

- RACI for investment review processes
- Defined templates for ICT project funding requests

Scope	All DTMB Customers
Project Sponsor	DTMB Budget Director
Business Owner	DTMB ICT Budget Lead
Critical Team Members	Project Manager (quarter-time) DTMB Budget Office Agency Services: 2–4 (half-time) Infrastructure Services Services Management ePMO ICT Finance

High-Level Project Plan

1. Define the roles and responsibilities for ICT investment review
2. Define templates for ICT budget funding requests
3. Conduct a pilot of the ICT Investment Management process
4. Establish periodic reviews of ICT investments to determine if proposed business benefits are being achieved

Estimated Duration	4–6 months to put the ICT Investment Management Process in place

Risks/Success Factors	Prerequisite Activities
DTMB cost estimates are not reliable Customers may resist having their projects managed to defined budgets	Project 5 — Redefine Customer Relationship Model Project 20 — Define Enterprise Service Catalog

Benefits	Costs
The State will focus on the business benefits from ICT investments	Internal Costs: $352K–$528K External Costs: $250K–$300K

Contingency Plan	Follow-Up Actions
DTMB willl manage to fixed-cost budgets	Apply the investment management process to all ICT projects

Project	18. Improve Project Portfolio Management	Program	E. Facilitate Project Prioritization and Portfolio Management

Objectives

- To improve the Call for Projects process so that DTMB can allocate resources against a defined list of priorities
  - This process should accommodate the need to determine whether DTMB staff or external contractors should be used for the project
- To allow customers to communicate the importance of their projects during the prioritization process

Addressed Recommendation Requirement(s)

- 1-3-1: DTMB must establish a governance model and processes that allow customers to voice the importance of their projects and initiatives during the project funding and prioritization processes
- 4-1-2: DTMB must have a defined process in place to proactively monitor and manage the demand and capacity for DTMB resources
- 4-4-1: DTMB must improve the portfolio management process (Call for Projects) and actively use it as the mechanism to prioritize projects across the enterprise
- 4-4-2: DTMB should standardize on a single portfolio management tool

Deliverables

- RACI for ICT project prioritization across the enterprise
- Implementation of the Project Portfolio Management tool
- Prepare ICT Project Portfolio for projects in progress and on hold

Scope	■ All DTMB Projects
Project Sponsor	■ ePMO
Business Owner	■ ePMO
Critical Team Members	■ Project Manager (quarter-time) ■ ePMO ■ CTO and Enterprise Architect ■ Agency Services: 2–4 (half-time) ■ Services Management ■ Infrastructure Services

High-Level Project Plan

1. Define the roles and responsibilities for ICT project prioritization and resource allocation
2. Configure and implement a Project Portfolio Management tool
3. Develop ICT Project Portfolio

Estimated Duration	■ 2–3 months to improve Call for Projects ■ 3–4 months to prepare the first ICT project portfolio

Risks/Success Factors	Prerequisite Activities
■ Customers may object to where their projects are prioritized in the project portfolio ■ Projects must specify the resources required for projects ■ DTMB must understand the resources available	■ Project 8 — Enhance Responsibilites and Capabilities of ePMO ■ Project 17 — Institute ICT Investment Management

Benefits	Costs
■ The State will better leverage existing resources to accommodate project demands	■ Internal Costs: $264K–$352K ■ External Costs: $150K–$200K

Contingency Plan	Follow-Up Actions
■ DTMB willl manage to fixed-cost budgets	■ Apply the investment management process to all ICT projects

Project	19. Enhance Project Management	Program	E. Facilitate Project Prioritization and Portfolio Management

Objectives

- To manage ICT projects against defined scope, schedule and budget
- To appropriately manage client change requests to project scope, schedule or budget
- To faciltate transparent communication between customers and DTMB on ICT project status

Addressed Recommendation Requirement(s)

- 4-1-1: DTMB must define specific budgets for each ICT investment
- 4-1-2: DTMB must promote an expectation that projects will be managed against defined budgets and that additions to scope or schedule will impact the cost for the delivery of the project
- 4-4-5: DTMB must consistently enforce a project management standard for all projects

Deliverables

- Documented project management standards and templates
- Documented process for handling customer change requests to project scope, schedule or budget

Scope	■ All DTMB Projects
Project Sponsor	■ ePMO
Business Owner	■ ePMO
Critical Team Members	■ Project Manager (quarter-time) ■ ePMO ■ Agency Services: 2–4 (half-time) ■ Services Management ■ Infrastructure Services ■ ICT Finance

High-Level Project Plan

1. Incorporate a process for handling customer change requests to project scope, schedule or budget into the standard
   - ❑ This process should be integrated with the ICT Investment Management review process

Estimated Duration	■ 2–3 months to define standards

Risks/Success Factors	Prerequisite Activities
■ Customers may resist having their projects managed to defined budgets	■ Project 6 — Enhance Responsibilites and Capabilities of ePMO ■ Project 17 — Institute ICT Investment ■ Project 18 — Improve Project Portfolio Management

Benefits	Costs
■ The State will better leverage existing resources to accommodate project demands	■ Internal Costs: $176K–$264K ■ External Costs: $150K–$200K

Contingency Plan	Follow-Up Actions
■ DTMB willl manage to fixed-cost budgets	■ Apply the investment management process to all ICT projects

Program F: Define Service Offerings

Program Overview

Program F: Define Service Offerings

Program Overview

- Program F is focused on preparing an enterprise service catalog with defined rates and service levels, and determining the appropriate sourcing strategy for each service.
- The completion of Program F will result in the implementation of an enterprise service catalog and a statewide sourcing strategy. The projects that comprise Program F are as follows:
  - F-20: Define Enterprise Service Catalog
  - F-21: Define and Implement Sourcing Strategy.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

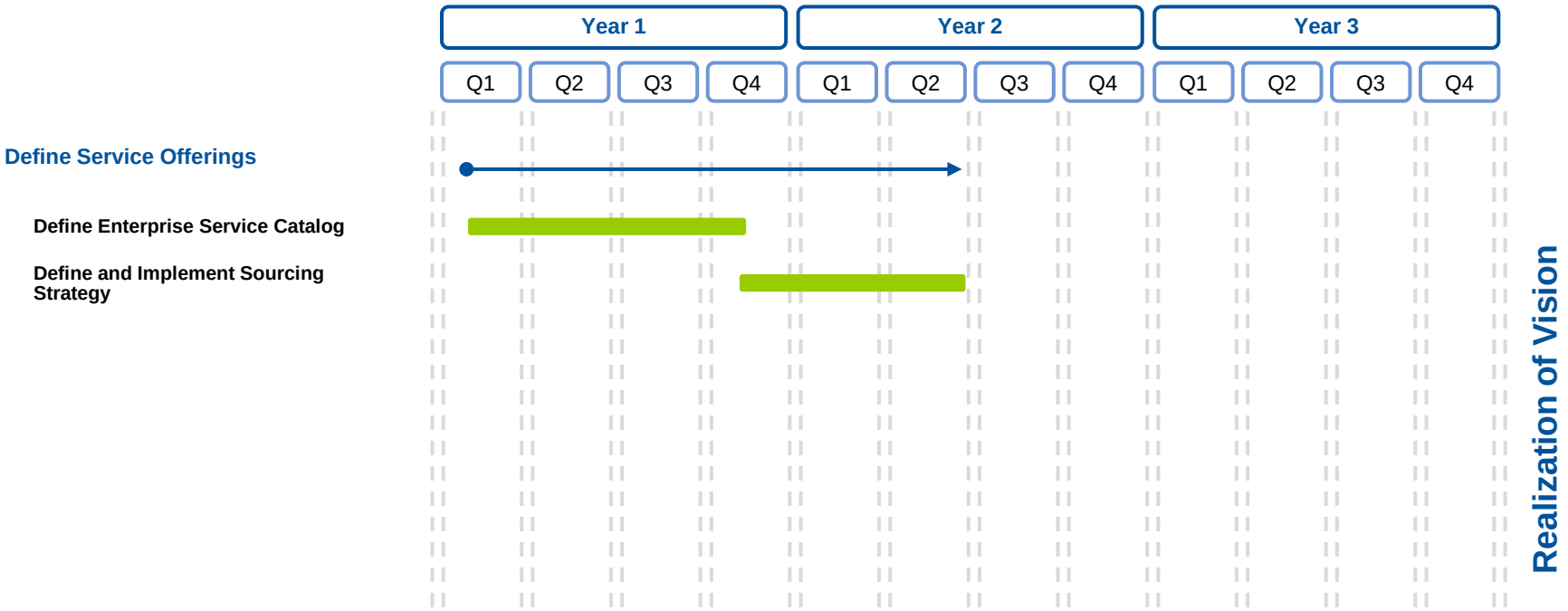
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $750K–$950K (est.) Internal Costs: $704K–$1.056M (est.) Potential Future Costs: ■ N/A	■ DTMB services will be consistently defined ■ Sourcing strategy and decision model to streamline decision making and yield wiser investments ■ Deep understanding of current costs/pricing in relation to market ■ Ongoing model for assessing service costs and pricing vs. outsourcing options	■ Enterprise Service Catalog ■ Rate Card ■ Sourcing Strategy Document ■ Business Case for each service to determine immediate sourcing decisions and model for future decisions ■ Road Map for tactical implementation of sourcing strategy

Program F: Define Service Offerings

Program Road Map

Program……
Project ……
Follow-On Tasks…

- DTMB should immediately begin Program F in order to define an enterprise service catalog. Although it is ideal to have the enterprise service catalog in place before defining a Statewide Sourcing Strategy, DTMB can begin the development of a sourcing strategy in concurrence with the enterprise service catalog definition.



Program F: Define Service Offerings

- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - Defining Service Catalogs
  - Defining Multi-Sourcing
  - Project Charters.

Program F: Define Service Offerings

Defining Service Catalogs

Program F: Define Service Offerings

Defining Service Catalogs: Why Develop a Service Catalog?

- Service Catalogs describe services in terms that customers understand and show the value of services to customers:
  - Specifies what the services are, how they are bundled and which benefits they deliver.
  - It includes service level options, limitations/exclusions, service level targets and, for organizations that recover costs, chargeback methods and pricing.
- Benefits of a Service Catalog:
  - A service is seen as a valuable asset to customers only when services are articulated in terms customers understand. **Articulating value** is the purpose of the Service Catalog.
  - Clear service definitions describe what is/is not included in the service, helping to **set clear expectations for customers.** A Service Catalog sets these expectations.
  - Updates to the Service Catalog provide a consistent forum for **communicating service changes to customers** and for outlining potential future services.

Program F: Define Service Offerings

Defining Service Catalogs: Elements of the Service Catalog

- The Service Catalog will define specific service offerings and options that customers can obtain from ICT.
- Each service offering in the Service Catalog contains a consistent set of elements:
  - **Detailed Service Offering Description —** Describes what the customer receives as part of this service offering
  - **Service Notes —** Describes any exclusions/limitations on the service provided; identifies anything the customer is responsible for in relation to the service offering
  - **Rates —** Identifies the chargeback method and unit rates to be used for cost recovery (not required if not recovering costs)
  - **Service Levels —** Identifies the current performance targets associated with each service
  - **How to Order —** Provides contact points and/or process for ordering
  - **Getting Help —** Provides contact points and/or process for reporting issues and getting resolution

Program F: Define Service Offerings

Defining Service Catalogs: Typical Chargeback Approaches

- The optimum chargeback approach for a service is one that balances customer needs and service provider needs in your organization.

Customers look for the following elements in cost recovery approaches:

Simplicity	Fairness	Predictability	Controllability
"Make what I'm paying for clear and simple to understand."	"I'll pay my share, but I'm not paying for anyone else."	"I'll pay what I need to, but don't increase the charge and put my budget at risk."	"I may need to cut my budget, with some of the cuts coming from IT."

Service Providers look for the following elements in cost recovery approaches:

Low Administrative Burden
"We need to easily track it and bill for it."

Program F: Define Service Offerings

Defining Service Catalogs: Setting Service Level Targets

- To define the appropriate service level for each service, two critical questions must be answered:
  - **What does the organization need to measure?**
    - What is critical to achieving the organization's mission?
    - What do customers care about?
  - **What can the organization efficiently and effectively measure?**
    - What is currently being measured?
    - Which tools are currently in place?
    - Are there related tools that can be easily implemented to gather data?
- Additional issues to be considered:
  - **What is your service window?**
    - Are services provided during "normal business hours" or 24/7?
      - Performance measurement would occur during the stated service window
    - Are there set periods when scheduled maintenance will be performed?
  - **What is a manageable number of service level targets to monitor?**
    - Monitoring too many service level targets can add administrative costs and lose effectiveness

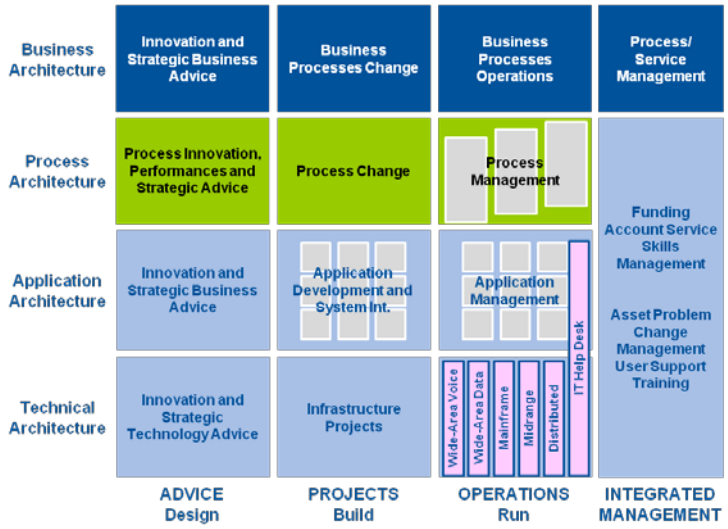
Program F: Define Service Offerings

Defining Multi-sourcing

Program F: Define Service Offerings

Benefits of Multi-sourcing

Multi-sourcing Strategic Framework



Multisourcing is the ***disciplined*** provisioning and blending of business and ICT services from the ***optimal set*** of ***internal and external providers*** in the pursuit of ***business goals.***

- Successful multi-sourcing strategies are informed by a deep analysis of an organization's goals and delivery capabilities to meet business objectives.
  - Key trends include repatriation of services, leverage of smaller, more-agile providers and near shore delivery
  - Innovative Service Delivery Models — Cloud, XaaS, Shared Services, etc. — are key considerations of critical multi-sourcing decisions
- Multi-sourcing can drive significant value; however, execution is complex and risks have to be managed with diligence.
  - Multi-sourcing requires managing an ecosystem of service providers (internal and external) all aimed at achieving a specific outcome as part of a larger initiative
  - Clearly defining scope, roles, integration points and accountabilities across the ecosystem is critical
  - 50% of price focused outsourcing deals end up being terminated or restructured — a key product of recent years; focus on business value criteria
  - 50% of "troubled" outsourcing deals attribute their challenges to poor vendor management competencies; buyers tend to under-spend in this important capability

Program F: Define Service Offerings

Project Charters

Project	20. Define Enterprise Service Catalog	Program	F. Define Service Offerings

Objectives

- To normalize different services and provide end user with single service catalog with end-user-oriented services
- To provide standard service definitions and performance criteria in the enterprise service catalog
- To develop a rate card that clearly articulates the price for services and is transparent about what is included in the rate
- To accommodate tiered-pricing of services as required

Addressed Recommendation Requirement(s)

- 2-1-1: DTMB must create an enterprise service catalog that articulates DTMB services and solutions in a manner that communicates business value to customers
- 2-1-2: DTMB must define an enterprise service catalog that clearly defines the service level expectations and pricing for each service
- 4-1-3: DTMB must have chargeback transparency in the rate card so that customers understand what is included in the rates for each service

Deliverables

- Enterprise Service Catalog
- Rate Card

Scope	■ All DTMB Services
Project Sponsor	■ Solutions Portfolio Manager
Business Owner	■ Solutions Portfolio Manager
Critical Team Members	■ Project Manager (quarter-time) ■ Service Managers ■ Agency Services: 2–4 (half-time) ■ ICT Finance

High-Level Project Plan

1. Define an enterprse service catalog that clearly defines services and expected service levels
2. Establish a rate card for each service

Estimated Duration	■ 4–6 months

Benefits	Costs
■ DTMB services will be consistently defined	■ Internal Costs: $352K–$528K ■ External Costs: $250K–$300K

Risks/Success Factors	Prerequisite Activities
■ DTMB must work with Agency Services to define services that communicate business value ■ The service management organization must be in place and ready to provide these services	■ N/A

Contingency Plan	Follow-Up Actions
■ Consolidate the existing separate service catalogs into one catalog	■ At a future point in time, a service catalog for all of DTMB, not just ICT, will be needed

Project	21. Define and Implement Sourcing Strategy	Program	F. Define Service Offerings

Objectives

- To determine which services DTMB should deliver internally and which services it should outsource
- To contract services that should be outsourced
- To develop a process to periodically review the sourcing business case for each service

Addressed Recommendation Requirement(s)

- 3-1-1: DTMB must define an enterprise sourcing strategy for its current services
- 3-1-2: DTMB must execute the sourcing strategy
- 3-1-3: DTMB must establish ongoing sourcing efficacy processes

Deliverables

- Sourcing Strategy Document
- Business Case for each service to determine immediate sourcing decisions and model for future decisions
- Road Map for tactical implementation of sourcing strategy

Scope	■ All DTMB Services
Project Sponsor	■ Solutions Portfolio Manager
Business Owner	■ Solutions Portfolio Manager
Critical Team Members	■ Project Manager (quarter-time) ■ Service Managers ■ Agency Services: 2–4 (half-time) ■ CTO and Enterprise Architecture ■ Procurement ■ Security ■ ICT Finance

High-Level Project Plan

1. Create a Sourcing Strategy Document that outlines criteria for sourcing a service internally or outsourcing the project, and the decision rules on when to insource vs. outsource
2. Develop a Business Case for each service (this will be the document that determines the cost/benefit of the service vis-à-vis the external market)
3. Develop a road map for tactical implementation of the multi-source strategy

Estimated Duration	■ 4–6 months

Risks/Success Factors

- Buy-in for sourcing strategy and governance model
- Diligence and accuracy of business case

Prerequisite Activities

- Project 20 — Define Enterprise Service Catalog

Benefits

- Sourcing strategy and decision model to streamline decision making and yield wiser investments
- Deep understanding of current costs/pricing in relation to market
- Ongoing model for assessing service costs and pricing vs. outsourcing options

Costs

- Internal Costs: $352K–$528K
- External Costs: $500K–$650K

Contingency Plan

- Identify key candidates for outsourcing based on current customer feedback and cost information

Follow-Up Actions

- Sourcing activities in support of decisions made
- Ongoing market assessment activities to benchmark cost and price of services

Program G: Improve Infrastructure and Security

Program Overview

Program G: Improve Infrastructure and Security

Program Overview

- Program G focuses on building off the past successes within the infrastructure and security domains to drive further efficiencies and adopt leading practices.
- Through the delivery of Program G, the State will institutionalize continuous improvement activities for two of its most successful disciplines, while also increasing proactive protection of State assets and data.
- The projects that comprise Program G are as follows:
  - G-21: Increase Infrastructure and Operations (I/O) Maturity and Automation
  - G-22: Enhance Security Discipline.
- The table below summarizes the estimated costs, benefits and major deliverables for the program.

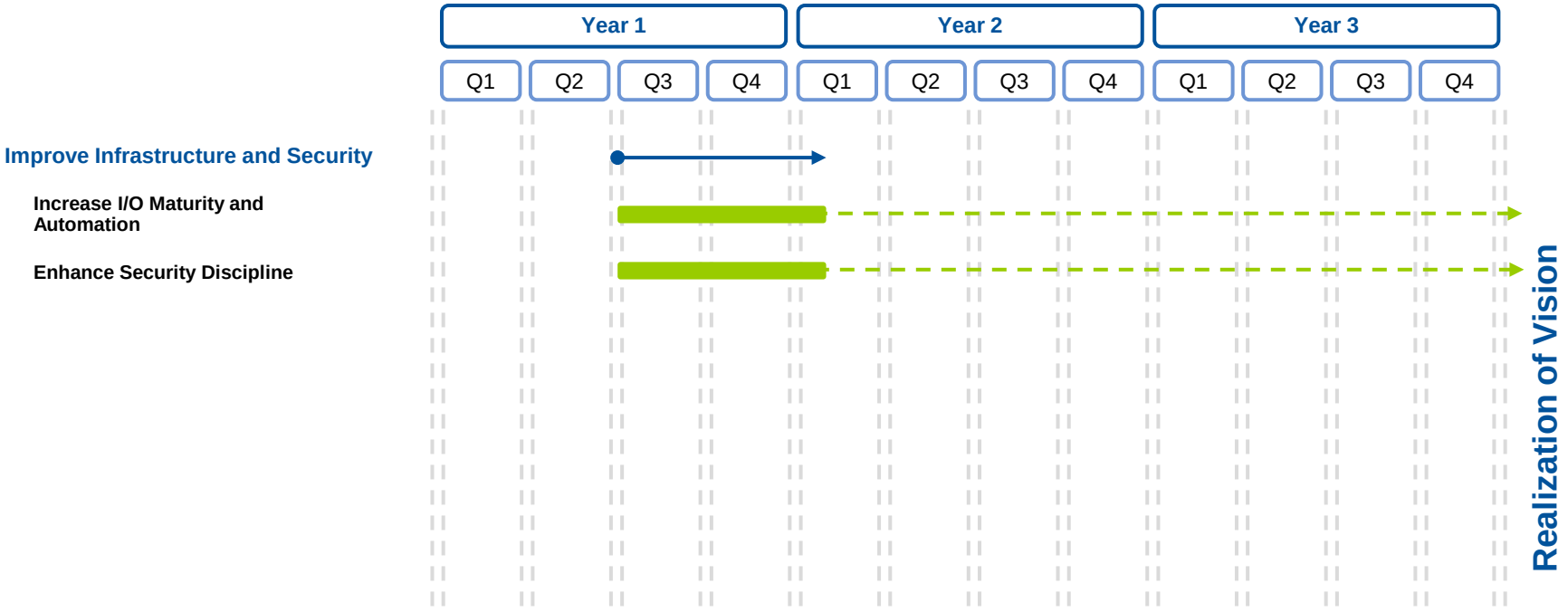
Cost Estimates	Chief Benefits	Major Deliverables
External Costs: $500K–$700K (est.) Internal Costs: TBD Potential Future Costs: ■ I/O Automation Tools ■ 24/7 Security Operations Center (SOC) implementation/augmentation cost ■ Vulnerability Improvement Tools	■ Increased efficiency of service delivery ■ Lower total cost of ownership ■ Identify and rectify relevant vulnerabilities ■ 24/7 capability of monitoring and responding to security threats ■ Decreased vulnerability	■ Business Case for Tool Acquisitions ■ Implementation of ICT Operations Tools ■ Information Technology Service Management (ITSM) Road Map and Updated Documentation ■ Single, or integrated, Configuration Management Database (CMDB) ■ Completed Security Audit/Risk Assessment ■ Establishment of 24/7 SOC Operations ■ Vulnerability Improvement Plan and Acquisition of Appropriate Tools

Program G: Improve Infrastructure and Security

Road Map

Program……
Project ……
Follow-On Tasks…

- Program G is composed of some tasks and projects that can begin immediately, as well as several ongoing tasks that will persist going forward. Opportunities for increased automation and maturing internal I/O processes will continue, as will security improvements and being proactive in protecting the State from new threats. Assuming funding and capacity are sufficient, the comprehensive security audit and risk assessment could begin immediately.



Program G: Improve Infrastructure and Security

- The following subsections provide the rationale behind this program and the summary charters for the projects that comprise this program:
  - Improving ICT Services Management
  - Security Overview
  - Project Charters.

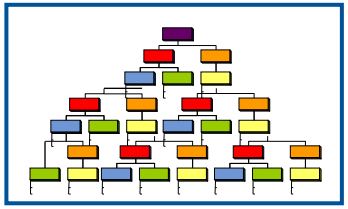
Program G: Improve Infrastructure and Security

Improving ICT Services Management

Program G: Improve Infrastructure and Security

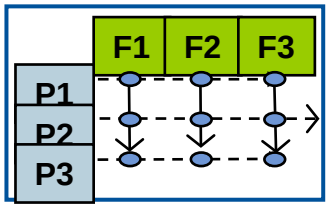
Improving ICT Services Management: Business Model Impacts ICT Service Management

- The service management model defined in Program B will impact the ITSM road map developed by DTMB. The model must balance the business customer's expectations of the ICT organization's alignment with the business and its responsiveness to changing business needs. The State must construct its ITSM structure to align with the target functional model.



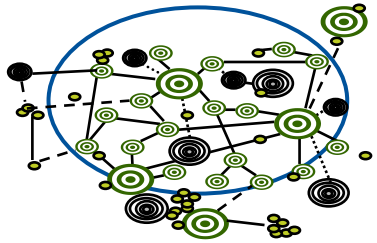
ICT as Cost Center

- Supply-driven
- Technology-centric
- Functionally and technically siloed
- Insulated and monopolistic
- Cost-obsessed



ICT as Service Provider

- Demand-driven
- Internal customer-centric
- Process-based
- Competitive and engaged
- Service-obsessed



ICT as Business Innovator

- Opportunity-driven
- External customer-centric
- Ecosystem-based
- Inventive
- Market- or industry-obsessed

Program G: Improve Infrastructure and Security

Security Overview

Program G: Improve Infrastructure and Security

Security Overview: Top Security Audit Findings to Avoid

- Given the time that has elapsed since the last comprehensive security and risk assessment, the State should seek to execute an assessment in the short to medium term.
- Gartner research identified 10 common risk and security audit findings that most enterprises such as the State of Michigan should avoid, if possible.

Type	Typical Finding	What It Means
1. Data Classification	The auditor is unable to produce an inventory of assets and associated classifications.	The enterprise does not know what it has, so the organization does not know how to protect it.
2. Change Management	The auditor cannot find evidence of change management on material systems.	No one in the enterprise is tasked with controlling mission-critical changes, so it is impossible to know which problems might result from changes.
3. Administrator Controls and Shared Accounts	Too many administrator (“root”) accounts are not tied to specific individuals.	Accounts are not tied to particular identities, so access controls and monitoring tools are ineffective.
4. Identity and Access Management	The auditor cannot determine each user’s privileges, or determine that each user has appropriate, and appropriately approved, privileges.	The enterprise does not know who has access to which systems or data, or whether that access is appropriate or approved.
5. User Activity Tracking and Log Analysis	No evidence of activity log collection and analysis can be produced.	The enterprise is unable to track user activity and produce a record of which employees have accessed which systems or data, or when.
6. SOD in ERP Systems	The enterprise is unable to control SOD issues in ERP systems that affect the integrity of financial reporting.	The integrity of financial reporting could be compromised by the use of conflicting permissions.

Program G: Improve Infrastructure and Security

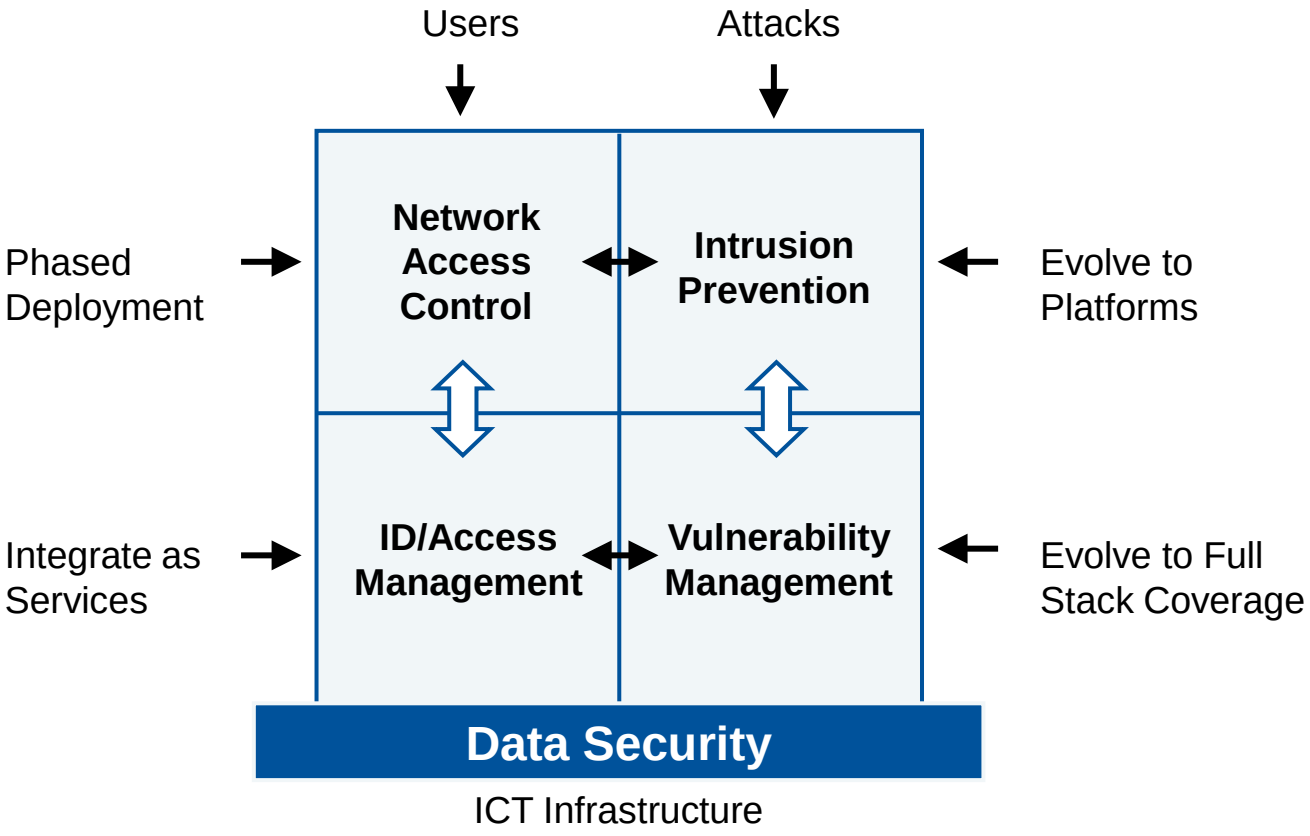
Security Overview: Top Security Audit Findings to Avoid (Cont'd)

Type	Typical Finding	What It Means
7. Physical Access	Physical access to the enterprise data center is uncontrolled.	The enterprise's critical systems, applications and information assets are at risk of damage, misuse or alteration by persons gaining unauthorized access to facilities.
8. Business Continuity Management and Disaster Recovery	The auditor cannot locate current, environmentally relevant business continuity plans or evidence of internal controls requiring the periodic updating and review of such plans.	The enterprise's critical systems and business processes could be crippled by a natural disaster or other emergency.
9. Sourcing Controls and Partner Agreements	The enterprise's agreements with business partners and third-party service providers do not specifically address data protection requirements.	Sensitive data may fall into the hands of unauthorized parties due to inadequate partner/service provider security measures.
10. Education and Awareness	The auditors cannot find formal evidence that employees know and understand their data protection responsibilities.	The security of enterprise systems and information assets is placed at risk by well-intentioned, but uninformed, employees.

Program G: Improve Infrastructure and Security

Security Overview: Importance of Vulnerability Management

- Gartner Research defines four high-level security processes that are key to the effectiveness and efficiency of enterprise security programs, one of which is vulnerability management. The State should mature this aspect of security in order to best protect State assets and data.



Program G: Improve Infrastructure and Security

Project Charters

Project	22. Increase I/O Maturity and Automation	Program	G. Improve Infrastructure and Security

Objectives

- Improve ICT operations through automation of manual processes within Infrastructure that focus on customer-facing processes around incident, problem management, provisioning, etc.
- Capitalize on usage of tools such as run book automation, provisioning, event management, status monitoring, performance monitoring and alerting
- Improve ICT process maturity by implementing a comprehensive ITSM road map across the ICT Towers for foundational ITIL processes such as incident, change and asset management
- Map out and automate interfaces, handoffs and trigger points between core processes; integrate (or adopt single) configuration management database (CMDB) across the core ICT Towers

Addressed Recommendation Requirement(s)

- 4-6-1: DTMB must identify automation opportunities in ICT operational areas

Deliverables

- Business Case for Tool Acquisitions
- Implementation of ICT Operations Tools
- ITSM Road Map and Updated Documentation (e.g., process maps, workflow documentation, cycle times, etc.)
- Single, or integrated, CMDB

Scope	■ Infrastructure Services
Project Sponsor	■ CTO
Business Owner	■ Infrastructure Services
Critical Team Members	■ Project Manager (quarter-time) ■ ePMO ■ Procurement

High-Level Project Plan

1. Identify process candidates for automation
2. Develop metrics and business case for tool acquisition
3. Procure and implement tools
4. Develop ITSM road map for ITIL process improvement
5. Implement ITSM road map
6. Define and execute plan for single, or integrated, CMDB

Estimated Duration	■ 15–24 months

Risks/Success Factors	Prerequisite Activities
■ Measurement of inefficiencies ■ Diligence in implementing ITSM road map	■ None

Benefits	Costs
■ Increased efficiency of service delivery ■ Lower total cost of ownership	■ TBD; depends on the processes/tools identified as top candidates

Contingency Plan	Follow-Up Actions
■ Operate using current tool set and focus on process efficiencies	■ Monitor tool performance and institute ongoing plan for assessing future tools ■ Measure ITIL process performance and maturity

Project	23. Enhance Security Discipline	Program	G. Improve Infrastructure and Security

Objectives

- Build on current strengths and continue to adapt to new threats
- Conduct a comprehensive security audit and risk assessment, and implement corrective measures
- Consolidate all security monitoring operations into one organization and stand up a true 24/7 SOC function with proactive monitoring skills
- Set up a process to perform vulnerability scanning and compliance across all areas of ICT infrastructure to include servers, network devices, desktops and mobile platforms; improve vulnerability management by patching desktops to application level

Addressed Recommendation Requirement(s)

- 4-7-1: DTMB must conduct a comprehensive security audit and risk assessment, and must implement corrective measures
- 4-7-2: DTMB must expand the scope of vulnerability scanning, cyber-security and risk management functions, and improve the Security Operations Control (SOC)

Deliverables

- Completed Security Audit/Risk Assessment
- Implementation Plan for 24/7 SOC Operations
- Establishment of 24/7 SOC Operations
- Vulnerability Improvement Plan and Acquisition of Appropriate Tools

Scope	■ All DTMB Technology Assets
Project Sponsor	■ CIO
Business Owner	■ CISO
Critical Team Members	■ Project Manager (quarter-time) ■ CTO ■ DTMB Budget Office ■ Infrastructure Services ■ Agency Services

High-Level Project Plan

1. Audit Baseline Information Capture and Baseline Environment Definition
2. Assessment and Recommendation Development
3. Deployment Road Map Planning
4. SOC Alternatives Analysis and Plan Development
5. SOC Sourcing/Staffing Activities
6. 24/7 SOC Implementation
7. Define Vulnerability Improvement Plan
8. Implement Vulnerability Improvement Plan

Estimated Duration	■ 12–18 months

Risks/Success Factors	Prerequisite Activities
■ Failure to stay current/ahead perpetually leaves the State at risk of a major security breach	■ None

Benefits	Costs
■ Identify and rectify relevant vulnerabilities ■ 24/7 capability of monitoring and responding to security threats ■ Decreased vulnerability	■ $500K–$700K (assessment) ■ SOC, vulnerability TBD

Contingency Plan	Follow-Up Actions
■ Conduct internal assessment; aim to enhance SOC organically	■ Conduct follow-up assessments at regular intervals ■ With CTO, remain current on trends, technologies and threats

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